The Wisdom of Uncertainty:
Exploring the beliefs of American Indian practitioners on teaching about the Ojibwe in environmental education.

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THE WISDOM OF UNCERTAINTY

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To the participants who helped me with this study; for their generosity, kindness, and willingness to talk openly about their beliefs, miigwech.

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CHAPTER ONE
INTRODUCTION

The first class I taught as an environmental educator was a class about the Ojibwe. In the north woods of Minnesota overlooking Lake Superior I demonstrated traditional skills and told Ojibwe legends. Students danced on wild rice, explored a seasonal Ojibwe camp, braided twine, and smashed logs with mallets to weave baskets. The classroom was magical.

At that time my historical and cultural resources consisted of a few books in the library and a time-tested lesson plan. As a beginning naturalist the curriculum was the script-the step by step process of what to do next-but the longer I taught about the Ojibwe the more questions I had. For instance, I observed students arriving with certain ideas about who the Ojibwe are. During one particular class I was demonstrating how to braid twine to a group of students. "Spit on your fingers, twist, twist, twist, then cross over." Behind me I began to hear shrieks and yelps coming from inside the winter house and my stomach sank. These were the sounds one hears in old western films. The war cry, with palms over their mouths. I watched in panic as the hands-on focus of the class suddenly shifted to my students "playing Indian."

I began to sense that my lesson plan blurred significant boundaries between "playing Indian" and teaching about the Ojibwe. I called myself "Long Legged Dragonfly" and had students selected Ojibwe names. I told legends in seasons other than winter and embellished traditional stories for dramatic effect to fit my curricular needs. I taught about Ojibwe people living 250 years ago and organizing my personal notes into bullet points about seasonal lifestyles, insisting that students recall which activity the Ojibwe were doing in a place and time far removed from our contemporary world.

Another turning point occurred during a 5th grade class after I showed a short video on the Ojibwe creation story. After the story was over I asked students what their first impressions were. A young boy quickly spoke up and said "The story is fake" and when I asked him "How so" he said " Because God created the earth." It seemed that the more I intentionally sought to explore students' beliefs, significant cultural issues emerged. I began to question the usefulness of my approach and the caricature it made of a living and dynamic Ojibwe culture. Most importantly I wondered how my programs were supporting the goals of multicultural learning and environmental literacy.

In looking at Native American programming in environmental education, I kept confronting rhetoric of certainty which made it difficult as an instructor to acknowledge the complexities and inconsistences found in non-Native interpretations of Ojibwe history, culture, and their relationship to the environment. I grappled with ethical questions such as whether

telling Ojibwe legends or using Native nicknames were useful practices for teaching cultural and environmental literacy, and I had growing concerns about the affordances of being a white teacher, of historical power and privilege, and how vulnerable children are to the misrepresentation of Native American people.

My experiences taught me that in order to teach quality environmental education I needed to expand my own knowledge about the Ojibwe and their relationship with the environment. Secondly, I needed to seek out the expertise of American Indian educators who could help inform my practice. Regardless of my background in Anthropology, I was at best portraying a homogenized Ojibwe people from my own worldview and I wanted to increase my knowledge about the diversity of environmental beliefs, practices, and issues that make up a living Ojibwe culture.

In reviewing literature on nonformal environmental education and American Indians there are two problems that this research seeks to address. First, there is little research in the field of nonformal environmental education regarding teaching beliefs (Taylor & Caldarelli, 2004; Moseley & Utley, 2008) and none that investigate the beliefs of American Indian practitioners on teaching about the Ojibwe in a nonformal environmental education setting; still, it is the case that "beliefs are far more influential than knowledge in determining how individuals organize and define tasks and problems and are stronger predictors of behavior" (Nespor, 1987 cited by Pajares, p. 311). In other words, beliefs shape behavior (Taylor, 2004; Richardson, 1996) and influence the types of content and practices educators employ.

Secondly, there exists the marginalization of contemporary American Indian experiences in environmental education (Willow, 2011). Too often program materials present a set of fixed events, ideas, histories, and cultural practices that occurred in the past. Fixating on a particular version of the Ojibwe story, we ignore the contemporary environmental experiences of Ojibwe people today. By simplifying Ojibwe perspectives on the environment we diminishes the opportunity to teach how Ojibwe people engage in our complex, political, and contemporary world.

In response to criticism that environmental education is not enacting the change in environmental attitudes and behavior by omitting multicultural perspectives on the environment, education *for* the environment has emerged which emphasizes a socially critical approach to environmental education (SCEE). This approach is characterized by an effort to challenge dominant ideology and promote personal and structural transformation (Cotton, 2006; Fien, 1993) by exposing the values that underlie environmental thinking. It acknowledges that teaching is never value-free and that the knowledge and attitudes that are most often transmitted are those

held by mainstream culture. It supports democracy, active citizenship, and respect for diversity, which are arguably the same principles upon which environmental education was founded.

Last year 50,000 students in the state of Minnesota visited a residential environmental learning center (RELC) and five out of the six most frequently attended offer Native American programming (P. Smerud Personal communication, September12, 2013). In an effort to appeal to attending K-12 school groups it has become increasingly important for nonformal programs to align their curricular content to meet Minnesota social studies standards. These standards require students learn about a broad spectrum of Ojibwe historical, social and political structures (Minnesota Department of Education, 2011).

For example, in fourth grade students focus on political geography and the "cultural landscape of North America" including tribal government (p. 23). By fifth grade, "students explore the history of North America in the period before 1800" (p.29). In sixth grade students "engage in historical inquiry and study events, issues and individuals significant to Minnesota history, beginning with the early indigenous people of the upper Mississippi River region to the present day. They examine the relationship between levels of government, and how the concept of sovereignty affects the exercise of treaty rights" (p.38) and " American Indian policy of the late nineteenth and twentieth centuries and its impact on Anishinaabeg and Dakota people, especially in the areas of education, land ownership and citizenship" (p.47).

While nonformal education settings aren't governed by the same formal standards to evaluate student achievement, they are encouraged to align their curriculum to address formal standards for participating school groups. Modeling nonformal environmental education lessons on standardized curriculum creates a whole set of questions about the transformative goals of environmental education and whether our goals are best achieved using similar frameworks.

There are great benefits to teaching in a nonformal environmental education setting. Research on learning in out of school setting has strong educational potential to increase knowledge and retention of information (Knapp, 2000; Naizer, 1993) and create positive attitudes towards learning (Bransford et al, 2000). This is particularly promising in light of the research showing that student attitudes towards social studies at all grade levels in the U.S. "found social studies to be one of the least interesting, most irrelevant subjects in the school curriculum" (Shaughnessy & Haladyna, 1985 cited by Loewen, 1995, p283). These studies suggest that learning about the Ojibwe in nonformal settings may increase student's academic engagement and interest in the social sciences.

While the opportunities for learning are great in nonformal settings, significant criticisms remain regarding the inclusion of non-dominant perspectives on the environment (Lewis &

James, 1995; Marouli, 2002), particularly for multicultural learning (Nordstrom, 2008, Taylor, 1996;) and the development of environmental education curriculum for American Indian youth (Cajune, 2012). Critics argue that environmental education has struggled to present non-western models of environmental thinking (Kato, 2002) suggesting the need to reexamine how indigenous perspectives are represented in Native American programming.

Multicultural learning, which acknowledges that students' needs are shaped by their culture and that cultural perspectives have unique ways of understanding the natural world "helps children become aware of, understand, accept, and celebrate other cultures and their environmental traditions"(Marouli, 2002, p.29). Incorporating non-western environmental thinking helps direct a future citizenry that is inclusive of all communities and aware of how communities are interconnected within our larger bio community (Milbraith, 1989 cited by Nordstrom, 2008, p.131).

Within higher education James (2003) points out that "research actually giving voice to those outside dominant cultures is still rare" (p.67) furthering the need for groups such as American Indian to be involved in research and curriculum development. If we want students to acquire multicultural knowledge about the environment we should engage in critical and repeated efforts to include a diversity of environmental and educational perspectives in our research and practice.

Similarly, researchers claim that environmental education programming conveys certain assumptions about Native American people. Willow (2010) asserts that Native American programming centers heavily on the past and omits contemporary environmental issues and identities. This fossilized representation portrays Native people as artifacts, perpetuating the vanishing Indian myth (Cajune, 2000) and curricular titles such as "How the Indians Lived" reinforce the idea that Native Americans no longer live in our contemporary world (Lanoutte, 1990).

As educators we comprehend, organize, and disseminate knowledge according to our belief system and from there we act accordingly (Nordstrom, 2008). Since beliefs "do not require general or group consensus regarding the validity and appropriateness of their beliefs" (Pajares, p. 311) they are valuable insights into the richness of human experience, thought, and behavior.

However, beliefs can limit our ability to think and act differently (Harman & Rheingold, 1984) by eliminating information that does not fit into our preconceived construct of the world. This has been the case of teachers in-training. Research on pre-service teachers revealed that beliefs are established long before we enter teacher-training programs (Calderhead and Robson,

1991) and we conceptualize how to be teachers during our earliest experiences as students. What is not known is how the experiences of American Indian's inform their beliefs about education and shape their practice as educators later in life.

A growing interest in education and of particular importance to this study is epistemology, "an area of philosophy concerned with the nature and justification of human knowledge" (Hofer and Pintrich, 1997,p.88) which considers; how people come to know knowledge, the beliefs people hold about knowing and how our knowledge influences thinking and reasoning. Examining the beliefs of American Indians will provide a different epistemological lens for teaching about the Ojibwe and for assessing or adapting programs to authentically align with the epistemology of Native American educators.

To prepare our students as multicultural citizens, it is increasingly important that we reflect on the diversity of environmental beliefs. If we are able to acknowledge that there is more than one perspective on social, historical and environmental phenomena- then we can better prepare students to participate in our complex and multicultural world.

Purpose Statement

The purpose of this study is to explore the beliefs of America Indian practitioners on teaching about the Ojibwe in a nonformal environmental education setting. The proposed methods of inquiry are semi-structured phenomenological interviews, which according to Marshall and Rossman (1999) involve " the study of lived experiences and the ways we understand those experiences to develop a worldview" (p. 116).

Research Questions

The following questions will explore and direct the scope of this study.

- What experiences do the practitioners have relative to teaching and learning about the Ojibwe?
- What content and practices could maximize and minimize learning about the Ojibwe?
- What is my position on teaching about the Ojibwe after reviewing the sources of evidence and literature?

Definition of Terms

Nonformal environmental education refers to non-traditional settings and methods that are viewed as "any organized, intentional and explicit effort to promote learning to enhance the quality of life through non-school settings " (Heimlich, 1993, p. 2). Nonformal environmental education setting can take place in settings such as "institutions, organizations, and situations outside the sphere of formal schooling; for example, field trips and museum visits, educational television and radio programs and other such activities" (Tamir, 1990, p.34).

This study uses the term Ojibwe and Anishinaabeg (plural) to refer to the First Nations people of the regions of the Great Lakes and Central Canada (Niemi, 2007). Terms such as American Indian or Native American will be used to discuss Indigenous people of North American in a general sense but is not meant to refer to the Ojibwe specifically. American Indian is used to describe the ethnicity of the participants, as not all of them are Ojibwe.

Teaching beliefs will be examined using the definition put forth by Richardson (2003), as "cognitive representations comprised of understandings and premises of a phenomenon or of the world around us." Significant qualities of beliefs include:

- Beliefs "represent the most stable and least flexible aspect of a person's perspective on teaching" (Pratt, 1998, p 21). Beliefs "mirror the truths constructed by people, guide behavior, act as a lens for assessing present and future actions, and are reflected in what people say and do" (Taylor, 2004,p 454).

Summary

In order to equip students with cultural competency that can lead to an informed citizenry, we need a diversity of interpretations about the Ojibwe to support our practice as educators. Developing accurate and fair programming requires the professional direction and expertise from American Indians to interpret, organize, and analyze program materials. Exploring American *Indian* beliefs on teaching about the Ojibwe is one potential place to begin.

CHAPTER TWO
LITERATURE REVIEW

The word 'uncertainty' served as a symbol for looking deeply at my beliefs about teaching and learning about the Ojibwe. It evoked a sense of curiosity and a willingness to examine how the lived experiences of American Indian practitioners shape their beliefs and the wisdom they have come to know through their experience. Besides the way the word 'uncertainty' resonated with my personal and professional interests, the National Association of Environmental Education "Guidelines for Excellence" suggests that cultivating uncertainty is a valuable skill for teaching environmental education:

> For each environmental issue there is not just one right answer or solution, there are many perspectives and much uncertainty. Environmental education cultivates the ability to recognize uncertainty, envision alternative scenarios, and adapt to changing conditions and information. (Simmons, 1996, p.2)

The following chapter will outline four distinct lenses that informed the development of this study and address the notion of uncertainty regarding teaching about Native Americans in environmental education. It will include discussions about environmental literacy, socially critical environmental education, Native Americans in environmental education, and teachers' beliefs.

Environmental Literacy

To understand the value of teaching about the Ojibwe in nonformal environmental education, it's best to begin by exploring the concept of environmental literacy. In examining how the beliefs of American Indian practitioners can enrich the development of Native American programming, the guidelines established by the NAAEE will be considered.

According to the Summary of Excellence in Environmental Education (NAAEE, 2004) literate citizens possess knowledge of systems that make up our social environment. This includes the relationship between society and the environment, examining real-life dramas of environmental issues, and understanding how different viewpoints and solutions are played out in our social environment. Organized into four strands, these guidelines represent broad aspects of environmental education, which serve to direct the goal of literacy and to develop requirements similar to those set by formal education standards.

Included among these goals is the importance of developing knowledge about different cultures throughout history and how cultures perceive and interact differently with their environments. For example, by 4th grade students should "understand that experiences and places may be interpreted differently by people with different cultural backgrounds, at different times, or

with other frames of reference" (NAAEE, 2004, p.8). To set students up for successful literacy acquisition, environmental programming should consciously offering a diversity of Ojibwe perspectives on the environment.

Teaching about the human influences upon environment thinking is a fundamental approach to literacy. In practice this includes investigating complex relationships found in "economics, culture, political structure, and social equity" (Simmons, 1996, p.1) and their effect on our natural environment. From this multidisciplinary approach, environmental education depends on the collaboration of a diversity of learning communities (NAAEE, 2004) and students are exposed to higher-order thinking and inquiry skills to investigating socio-environmental issues.

Another effective learning strategy for the development of literacy is teaching students about local cultural communities. Addressing how politics, economics and social equity play out on a local scale gives students the skills to be better able to solve problems on a global level (Simmons, 1996).

Above all, the purpose of environmental education is to achieve environmental literacy yet definitions of literacy are arguably culturally bound, favoring certain types of knowledge over others. While most environmental literacy definitions contain four components: knowledge, skills, effect, and behavior (Disinger and Roth, 1992) others have expanded the definition of literacy to highlight the role that culture plays in its conception. For example, literacy can be defined as "tools for reading the world- bodies of knowledge, skills, and social practices with which we understand, interpret, and use the symbol systems of our culture" (Cited in Hull et al, 2003, p.2). From this perspective, environmental knowledge, skills, and practices are culturally bound and subject to interpretation rather than supporting any particular worldview over another.

The quality and fairness of teaching materials about Native Americans is a concern among some scholars in environmental education and in particular, the representation of Native American people and their relationship with the environment (Willow, 2010). In "Environmental Education Materials: Guidelines for Excellence" the NAAEE outlines a set of key characteristics that support high quality environmental programming. Characteristics of quality programming include fairness and accuracy, depth, skills building, and action orientation. Furthermore, it states that quality programming presented environmental issues or conditions through a diversity of perspectives.

For example, an indicator of fair and accurate programming involves " experts in multicultural education and members of historically underrepresented groups, such as women and people of color, have been involved in the development and review process" and that "a range of

experts in the appropriate fields reviewed the materials or participated in their development in another way" (p. 6) and it is suggested that materials provide the names of people involved in the development and review process. Additionally, programming should have "depth" and foster the awareness of values, attitudes, and perceptions of a diversity of people- for these beliefs rest at the center of environmental issues (Simmons, 1996, p.7).

May's (2000) survey of environmental educators across the country showed that cultural competencies involving socio-political aspects of the environment, are important for the instruction of quality environmental education. Other significant qualities identified by educators include the "nature of social and political operations and the role these play in diverse and evolving complex environment issues" and the knowledge of local culture and subcultures, and the "ways in which these human elements interact dynamically with environmental issues" (May, 2000, p.10).

Socially Critical Environmental Education

Written in 1975, the Belgrade Charter identified environmental education as an integral part of establishing a "new global ethic"(UNEP, p.1). Central to this idea was that education be used to reconstruct the attitudes and behaviors of society in order to preserve natural resources and sustain economic and social well-being. In addition to the Belgrade Charter, the Tbilisi Declaration (UNESCO, 1977) called for an interdisciplinary and holistic approach to education aimed at addressing and solving the current problems of society.

In practice scholars have argued that environmental education has fallen short of these foundational goals by neglecting the social issues that contribute to the exploitation and degradation of people and the environment (Connell, 1997; Payne, 1995; Smyth, 1998 cited in Barry, 2006). In response, a social critically approach to environmental education has been offered as a model of teaching how cultural, political, and economic processes have contributed to environmental perspectives and conditions. Cole (2007) captured the uncertainty of ascribing to this approach in the following statement: "It's a risky endeavor to reimagine environmental education through unfamiliar lenses that critique established frames of reference and guiding principles. Educators and researchers must risk new ideas to develop creative approaches to environmental education" (p. 43).

The purpose of socially critical environmental education is to challenge dominant ideology and promote personal and organizational transformation (Cotton, 2006; Fien, 1993). Critical pedagogy supports the role of teaching socio-cultural issues (Cole, 2007) and the viewpoint that environmental education should influence change in students' attitudes while engaging students to take environmental action (Breiting & Mogensen 1999, Posch 1999).

From a critical theoretical lens, developing a citizenry that is environmentally literate is a political act as concepts that define and measure literacy embody a particular set of values about the environment. From this perspective, values are culturally specific rather than universal (Cole, 2007) and education is a cultural and political construction. Disinger (1992) argues that if environmental education is to achieve and direct students' behavior as citizens, we should pay close attention to bias, values, and ideas that we uphold for these are the very things that shape and guide our curriculum and practice. One unintended consequence of our beliefs is the reproduction of social inequalities in our programs and the marginalization of perspectives different from our own.

Yet we are not always aware of how our beliefs shape our practices as environmental educators. Critical scholar Anna Cole recounts her experiences teaching in a rural high school in New Mexico and how she came to realize that "history, culture, politics, and power" (p.36) were concepts that her programming failed to address, claiming that her students could not achieve a holistic understanding of EE without examining the socio-political assumptions underlying its concepts.

Others have called for a more culturally conscious approach to EE by teaching students to question the beliefs that underlie environmental content. In "Towards a Theory of Culturally Relative Pedagogy" Ladson-Billings (1995) calls for a model that develops critical perspectives that challenge the status quo and expose inequalities in education and other institutions" (p.469). Three criteria that educators should use to address culturally relevant teaching include the ability to develop students academically, willingness on the part of the educator to support cultural competency, and to develop sociopolitical/critical consciousness.

Similarly, Agyeman (2002) argues that students would benefit from emphasizing culture in all subjects by calling for a "culturing of environmental education." An approach to culturing environmental education involves "acknowledge(ing), welcome(ing), and celebrate(ing) these numerous (new) voices, counter- narratives, identities, and discourses and respect(ing) the validity of their inputs" (p7).

Native Americans in Environmental Education

Teaching about Native Americans is no simple task, particularly when we look at the complexities involved in its study. A publication distributed by the National Council for Social Studies (Harvey, 1990) cautions teachers to avoid oversimplification when teaching about Native Americans, reminding educators of the following: that Native American cultures have been around for 20 or more millennia before written history and prior to European contact. There were at least 200 languages spoken in North America alone. Today in the United States, there are 505

federally recognized tribes with distinct cultural traditions and histories. Furthermore historical records are speculative as they were overwhelmingly written by European scholars and explorers.

Despite the vast diversity of Native American culture and history, a majority of children and adults in the United States believe that Native Americans are people that lived in the past, hunted buffalo, wore buckskin and lived in tipis (Reese, 2007). Similarly, Doering et al (1999) reported that visitors attending the Smithsonian Museum had superficial understandings of Native American philosophy, history, and present day social conditions. While visitors had had some contact with Native Americans in their life, imagery of the past in which Native Americans lived in harmony with nature and had control of their destiny dominated participants' responses. Visitors also perceived Native American life today as grim except when they had assimilated into an urban environment and that reservations were associated with issues such as poverty, poor health, unemployment but were successful environments for preserving traditional ways of life.

To explore why misunderstandings about Native Americans persist in the general public, I turned to the social studies standards in Minnesota as a way to explore collective thinking about the Ojibwe and what students are required to know. Surprisingly, the concepts support a balance of past and present Ojibwe cultural systems. Additionally students are expected to engage in historical inquiry by reviewing multiple sources of evidence and examine socio-political issues effecting Ojibwe people today. For example, by 2nd grade students should "compare and contrast daily life for Minnesota Dakota or Anishinaabeg peoples in different times, including before European contact and today" (p.30). By 4th grade students should possess the ability to describe "tribal governmental and some of the services it provides" (p.38)" and by 6th grade students should "explain the concept of sovereignty and how treaty rights are exercised by the Anishinaabeg and Dakota today" (p.56).

However, Brune's (1982) study of Minnesota teachers found that when teaching about Native Americans educators concentrate more on life style, material culture, and families and were reluctant to teach topics on value systems or religion. The study also revealed that while access to written materials had increasingly met the needs of teachers over time, teachers felt inadequate to teach about Native Americans because of a lack of training on the subject. While the newest social studies standards have changed considerably over the past 30 years, it is in the interest of this study to question whether teachers feel more or less prepared than they did before. To address these concerns the author recommends that educators actively seek out dialogue with Native American communities "to determine the most important elements in teaching about Native Americans" ("Recommendations", para.1). Intercultural dialogue could support teacher

competencies needed to effectively and comprehensively address Minnesota's academic standards.

Even if educators receive training to teach about Native Americans, Taylor (2004) found that nonformal environmental educators are not always given the freedom to apply their knowledge and skills in the programs they teach because they may be expected to follow a particular educational approach or philosophy that is incongruent with their beliefs. Adding to these barriers, Grace and Shape (2000) found that student teachers faced opposition from staff when implementing an approach to environmental education as advocated in literature.

There are a number of concerns significant enough to question the purpose, fairness, and accuracy of Native American programming in environmental education. These include concerns regarding the representations of Native Americans as environmentally noble (Ward, 2011; Willow, 2010) and the omission of contemporary Native American cultural and environmental perspectives. Furthermore, Knudtson and Suzuki (2006) suggest that the representation of Native views on nature are reductive:

> Native views of nature have too often been unjustifiably denigrated as somehow Inherently simple, primitive, or naïve; reflective of an earlier and therefor inferior stage of human cultural progress; and beyond this however, poetic or enduring, as completely irrelevant to our sophisticated modern needs and times. (p.6)

Critics claim that environmental education has fashioned a Native American image to fit the pedagogical and philosophical purposes of the field (Nadasdy, 1999) and the ecological Indian image serves to uphold a particular ideological perspective on the environment.

Willow's (2010) investigation of nationally produced materials about Native Americans in Project WET and the *The Keepers Books* found an absence of contemporary realities and a complete omission of the effects of colonialism on Native American people. She argues that what *is* transmitted is the message that Native Americans are invariably ecological and not a part of our contemporary world, that the erasure of contemporary realities and the glorification of a selective interpretation of the past is the product of a collective "imperialist nostalgia" (p.67).

In light of Willow's critical examination of environmental education materials, a survey conducted by the National Consortium for Environmental Education and Training (Wade, 1996) investigating the current practice of in-service K-12 teachers in the United States revealed that environmental education is dominated by nationally produced curricula and activity-based methods. Together these studies suggest that a) nationally produced materials are a dominant form of content delivery b) that these materials can reproduce incomplete messages about Native American people.

The convenience of using nationally produced curricula or online resources to teach about Native Americans is of particular concern among Native and non-Native scholars. Cultural knowledge such as telling indigenous stories poses ethical concerns related to the appropriation of cultural material and their intended or unintended use.

Ward's (2011) essay on teaching about Native Americans in environmental education asserts that the unauthorized used of cultural material such as ceremonies, stories or traditional objects, constitutes a theft and a disregard for Native American authority and credibility. He also describes a common practice for teaching and Native Americans in environmental education called the 'tourist approach', which " typically involve(s) self styled indigenous activities defined by authorities and educators who, despite their credentials, are most often non-Indian or are without ancestral, familial, or similar ties to the tradition cultures under discussion" (p.4). The main problem persists that from some traditional and academic indigenous perspectives, the use of songs, stories, ceremonies or any other cultural property without the authorization by Native people constitutes intellectual property theft.

Likewise, Debbie Reese (2007) describes how translating traditional stories, which include not only language, but elements of oral and visual performance, into written text and illustrations is "fraught with difficulty" and flawed by misrepresentation. "It means turning a living, dynamic entity into something that is relatively static" (p.247). In "Proceed with Caution: Using Native American Folktales in the Classroom", Reese (2007) explains that traditional stories are more than just entertainment; they are significant to the well-being of the communities from where they originate. As such it is important that educators carefully examine the source of their story, how the story was changed and from which specific tribe the story originated. "Making informed choices when selecting books about Native Americans requires a substantive knowledge base," (p. 246) and depending on the audience, cultural depiction acceptable for one group of Ojibwe might not be acceptable for another.

Kincheloe and Steinberg (2008) claim that one of the inherent problems with the study of indigenous knowledge has to do with essentialism, the belief that a concept is characterized by a set of essences or unchanging qualities. "Addressing the problem of essentialism is a complex but necessary step in the study of indigenous knowledge. While there is no problem examining indigenous people/knowledge as a discrete category, we must always be careful to avoid racial or ethnic designations that fail to discern the differences between people included in a specific category" (p. 142). One example of this essentialism is to represent Ojibwe people as cultural static and unchanging. Or in the case of telling Ojibwe stories, searching for a singular Ojibwe perspective regarding the use of stories in educational programs. Essentialism also includes the

assumption that indigenous people share particular beliefs about the environment, which further simplifies the complexity among Ojibwe people who have diverse traditions, experiences and beliefs.

In the case of the Ojibwe, culture and identity continue to be dynamically shaped by a multitude of factors. Hermes' (2000) investigation of cultural curriculum at Lac Courte Oreille Ojibwe School found that cultural boundaries are always changing and that Ojibwe culture is not a firmly fixed entity defined by a unified group of people. She cautions educators that when cultural curriculum is presented as an add-on subject with fixed definitions and ideas, this increases the risk of isolating Ojibwe culture as a separate extracurricular study.

According to Kincheoloe and Steinberg (2008) when Native Americans are regarded with equal credibility and legitimacy the "rewriting" and "re-righting" of Native American history (p. 147) becomes truly multilogical. In multilogicality (Villaverde, Kincheloe and Helyar, 2006) we are invited to "break from the class elitist, white-centered colonial, patriarchal histories that have dominated western historiography for too long" (p. 146).

This is particularly important since historically educators and historians have not attempted to find out how Native Americans would interpret, analyze, or document their own history, histories which Wilson (1996) argues should be called "Non-Indian perceptions of American Indian history" (p.3). Furthermore there exists a double standard when authors write about Native Americans yet ignore oral sources, that somehow the integrity of their work is preserved despite consulting indigenous sources. Common arguments for not consulting indigenous sources include: "I don't know any Indians who will talk to me", "Oral sources cannot be validated and therefore are not trust-worthy" and "Facts cannot be distinguished from fancy" (Wilson, 1996, p 3).

Recently author David Kenny spoke about writing *Northern Lights*, the newest social studies textbook for 6th grade. When asked if there was something that really "wowed" him about the history of Minnesota he replied that "the richness of the American Indian experience in this state... (The) stories that touch on the experiences (of the) Dakota and Ojibwe are essential to understand who we are as people today" (Webber, 2013). Kenny explained that the newest chapters on the Dakota and Ojibwe were written under the direction of American Indian scholars, a process that revealed certain assumption in his own thinking as a historian. Since historically Native Americans have had little to say about the translations and interpretations of the histories they have readily shared with scholars (Wilson, 1996) this signals a shift in the way Native American history content is written for students in Minnesota.

Teachers' Beliefs

In the field of environmental education, most research dealing with teacher's beliefs have focused on program evaluations and the impact these programs have had on the acquisition of knowledge and attitudes of students (Moseley and Utley, 2008). Few researchers have investigated teaching beliefs (Taylor & Caldarelli, 2004) or how beliefs influence curricular choices when teaching about Native Americans. Even less is known about the experience of American Indian's teaching and learning about the Ojibwe.

Yet beliefs play a fundamental role in how teachers organize and disseminate knowledge (Mosely and Utley, 2008) and how we make sense of our world. They are based on prior experiences and rooted in our cultural background (Deplit, 1995 and Southerland & Gess-Newsome, 1999) and shape how we perceive the natural environment (Turner & Pei Wu, 2002). Beliefs impact classroom behavior and are more influential than knowledge in determining how people define problems and act on behaviors (Pajares, 1992).

Calderhead and Robson's (1991) research on pre-service teachers sought to understand what their beliefs were regarding teaching and learning. The findings reported that new teachers held images of teaching from their experiences as students and that these images influenced their approach to teaching. Similarly Southerland and Gess-Newsome (1999) found that pre service teachers construct images of teaching from their experiences as elementary and secondary learners.

Bryan and Atwater (2002) argued that if beliefs can influence practice and if practices can creates conditions that work against culturally diverse students, recognizing teacher beliefs should be an important part of teacher preparation and cultural competency training.

Of particular interest to this study, Niemi (2007) examined the espoused beliefs of Ojibwe people and their actual practices towards the environment and found there to be a significant disconnect between the two. Ojibwe participants in this study suggested that the disconnect was rooted in the effects of historical trauma. She recommends that educators represent Ojibwe people as imperfectly human rather than ecologically noble and encourages us to increase our knowledge of social and historical issues that effect Ojibwe communities today.

Summary

In this chapter four broad areas related to this study were explored: environmental literacy, socially critical environmental education, Native Americans in environmental education, and teacher's beliefs.

By beginning with environmental literacy I sought to ground the study in the goals and guidelines set forth by practitioners in the field, thereby strengthening arguments that support the

need for the co-creation and review of environmental education programming by American Indian practitioners.

This study is largely examined through a socially critical lens, which is characterized by the notion that teaching is never free of bias and that environmental education has the potential to reproduce beliefs that underlie social inequality. In examining the beliefs of American Indian practitioners this study welcomes personal and historical narratives pertaining to the environment thereby revealing how beliefs underlie political, cultural, and social issues effecting the environment. Furthermore SCEE supports that education should be used to make changes in the world, changes that work towards social equality. One step towards such change is the recognition that Ojibwe people should be honored as co-creators of their own past and present histories.

Historically non-Native scholars, historians, and educators have been the disseminators of indigenous knowledge in education- but have arguably reduced such knowledge to digestible facts/ideas pertaining to a selective interpretation of the past. From this perspective Ojibwe people are hardly viewed as members of our contemporary world yet Ojibwe people are actively pursuing environmental practices and ideologies that contribute to our entire environmental and educational community.

Lastly, beliefs shape our practice and influence the types of curriculum and information that we present to students yet there is very little research in the field of nonformal environmental education regarding teaching beliefs. Even less is know about the beliefs of American Indians and how their experiences shape their practice as educators. This study seeks to explore beliefs as a tool for social transformation and a taproot from which a new approach to Native American programming can evolve

CHAPTER THREE
METHEDOLOGY

The purpose of this study is to explore the educational beliefs of American Indian practitioners on teaching about the Ojibwe in a nonformal environmental education setting. The central questions guiding the collection of data are:

- What experiences do the practitioners have relative to teaching and learning about the Ojibwe?
- What content and practices could maximize and minimize learning about the Ojibwe?
- What is my position on teaching about the Ojibwe after reviewing the sources of evidence and literature?

Approach

The methodological design involves a qualitative research approach. Denzin and Lincoln (2005) capture the ever-changing and interpretive nature of this form of inquiry in the following definition:

> Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world.... This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. (p.3)

According to the above definition, the potential impact of qualitative research is to bring about the transformation of problems in society by inquiring into the meanings that individuals give to those problems. Using an inductive analysis approach to uncover patterns or themes from participant's meaning, qualitative research involves collecting data from settings in which participants engage in the research problem.

A significant strength of qualitative research is that it is emergent. Details of the process may change or be refined as the researcher learns more about the central phenomenon at hand. This is a particularly helpful approach for this study since little is known about the beliefs of American Indians on teaching about the Ojibwe and no prior investigations of American Indian beliefs about environmental education.

Central to this study, and supported within a socially critical framework, is that qualitative research can be used when marginalized voices or issues need to be explored (Creswell, 2003) as the design allows for a holistic, emergent, and humanistic exploration of personal beliefs.

Theoretical Orientation

The purpose of this study is to explore the educational beliefs of American Indian practitioners on teaching about the Ojibwe in a nonformal environmental education setting. Research pertaining to the beliefs of American Indian practitioners is a topic that has not been explored in the field of environmental education therefore this approach allows the researcher to explore the topic using topics found in existing literature.

Stebbins (2001) describes exploratory research as a perspective and an approach that helps guide methodological discussions beyond the simplification of qualitative vs. quantitative or inductive vs. deductive. This perspective creates opportunities to expand beyond what has been previously written and to offer potentially new insights. Exploratory research searches for themes, patterns, and categories of meaning and how these patterns are connected to one another (Marshall and Rossman, 1999).

Data collected from this study has the potential to inform the practice of other educators teaching about the Ojibwe, however, the study does not seek to generalize about American Indians or be applied to other tribes found in Minnesota or North America broadly.

Phenomenological Design

To explore the beliefs of American Indian practitioners a phenomenological strategy was followed according to Moustakas's (1994) Stevick-Colaizzi-Keen method of analysis (p.121). Creswell (2007) suggests that a research problem is best-examined using phenomenology when the researcher seeks to understand a shared experience of a phenomenon by several individuals.

This research seeks to present a rich description of participant's beliefs and to better understand the meanings these individual give to teaching and learning about the Ojibwe. Phenomenology allows the researcher to examine the complexity and multiplicity of the phenomenon. How these participants create meaning about the phenomenon constitutes reality and the essence of this reality can be useful in informing the practices of both Native and non-Native educators in teaching about the Ojibwe.

Van Manen (1990) describes phenomenology as interpreting the "texts" of life, which generally begin through an "abiding concern" that interests the researcher (Creswell, 2007, p. 31). It requires suspending ones personal experience, also known an epoche, in an effort to examine the experience of participants with a fresh perspective, "as if for the first time" (Moustakas, 1994, p.34).

Drawing heavily from the philosophical work of Edmund Husserl and explored by researchers in the field of math, health, science and education, the approach requires a subjective

openness and returning to oneself to discover meanings as they appear in their essence. Hussler believed that knowledge based on intuition supersedes empirical knowledge and the perception of a phenomenon is dependent on the meaning given to it. Moustakas (1994) describes this process as "recognizing that my own knowledge and experience, in a free, open, and imaginative sense, ultimately would determine the core ideas and values that would linger and endure" (p 26).

Four broad perspectives capture its essence: phenomenology is a search for the wisdom found in philosophical thought rather than empirical science, the approach involves the researcher suspending all judgment about reality until it is found to be true by participants, reality is related to ones consciousness of it and that there is no dichotomy between subject and object, and reality is perceived through the meaning individuals give to their experience (Creswell, p59).

Participants

Participants were selected using purposive sampling and chosen if they possessed leadership and expertise in Ojibwe history, culture, indigenous education, or in teaching in a nonformal environmental education setting. All participants identified as American Indian however not all participants identified themselves as Ojibwe.

To locate potential participants the following forms of recruitment were used in this study: A) the researcher asked professionals at the Fond du Lac reservation as well as colleagues at the University of Minnesota-Duluth to provide names of individuals they knew who might be interested in participating. Email addresses were obtained through these references and emails were sent to elicit potential participation; B) the researcher conducted an Internet search of individuals associated with teaching and learning about the Ojibwe in the area of Duluth. Email addresses and phone numbers provided by public websites were used to contact individuals; C) the researcher was referred to individuals by word of mouth through contacts made using online recruitments and colleagues.

All potential participants were initially contacted via email. The email introduced the researcher and the study. If participants agreed to the study, they were sent another email outlining the study and consent document (Appendix B). Participants were asked to sign the consent document at the time of the interview and were provided a copy as a record to keep (Appendix C).

Researcher's Role

I first encountered teaching about the Ojibwe while I was working at a nonformal residential environmental learning center. It was in that setting where I received formal and nonformal training and it was my first experience teaching about the Ojibwe. In light of my assumptions and biases that have grown out of my direct experience with this phenomenon, the

following consideration were been made to ensure that my beliefs did not filter out potentially rich and unexpected data.

The practice of epoche (Moustakas 1994) was used as a tool to psychologically and reflectively approach the data collection and analysis process. An elusive idea at first, the practice manifested itself physically as a pre-interview meditation. Moustakas writes "everything referring to others, their perceptions, preferences, judgments, feelings must be set aside for achieving the Epoche" (p. 88) and that the epoche "encourages an open perception is that of reflective-meditation, letting the preconceptions and prejudgments enter consciousness and leave freely, being just as receptive to them as I am to the unbiased looking and seeing" (p89). Epoche allowed me to listen more deeply without trying to impose or force my own habits of thinking onto participants. To practice epoche I set aside an amount of time to sit in quiet meditation before each interview and made a conscious affirmation to make space for the participants to respond to questions however meaning is best understood for them.

Bracketing, or "the act of suspending ones various beliefs" (van Manen, 1990, p.175) was accomplished by writing down a full description of my experience prior to data collection. This involved a conscious evaluation of my personal values, judgments, and experiences. To do this I provided stories and descriptions that expressed my beliefs about teaching and learning about the Ojibwe and provided written responses for the interview questionnaire.

Ethical Issues

To gain access to the participants the researcher first sought permission from the Institutional Review Board, which reviewed the proposed details and procedures of the project and assessed its potential impact and risk to the participants. Since the involvement of American Indians was sought, special considerations were required.

A consent form was created which included specific elements to protect the participant's rights. This consent made explicit that participants could withdraw for the study at anytime and that the researcher would protect their confidentiality throughout the entire process. The consent document outlined risks and benefits associated with the study and included the purpose of the study and procedures being used. As suggested by Creswell (2007) for phenomenological studies the researcher obtained written consent from each participant.

All participants were provided with the number to the Research Subjects' Advocate Line as well as the contact information of the researchers' advisor. The records of participants including emails, audio recordings, and any other information were kept private and stored securely in a file only the researcher could access via a password secured computer. The audio

recordings and transcriptions of the interview will be destroyed by May 30th, 2013, by the researcher.

Emails sent to potential participants were sent privately using a blind carbon copy (BCC) to ensure anonymity. The researcher did not keep track of individuals who did not want to participant in the study. Only the information of those who agreed to participate were kept on file.

Data Collection Procedure

This phenomenological study involved one-on-one semi-structured interviews with each participant in order to understand his/her beliefs about teaching and learning about the Ojibwe. Semi-structured interviews allowed a certain level of control over the line of questioning (Creswell, 2007) while allowing a flexibility to follow up and explore other questions if needed. Conducted many times interviews allow the researcher to begin to forge a common understanding. Van Manen (1990) refers to this process as " a means for exploring and gathering experiential narrative material that may serve as a resources for developing...deeper understanding of a human phenomenon" (p.66).

Most interviews took place in the settings in which these individuals worked rather than bending the participants to fit a context determined by the researcher (Creswell, 2003). This enabled the research to become an observer of the participant's world while providing a more authentic environment for the research to take place. Only one individual was unable to meet in person and the interview was conducted using SKYPE.

The final data collection involved five one-on-one interviews, which occurred only once, potentially limiting the data in breadth but not depth. Since the strength of participants' responses is dependent upon their ability to articulate their beliefs and express their experiences fully, the results are subsequently confined by how much the participants were willing to discuss. A further limitation to semi-structured interview is the potential to influence participant's responses however (Creswell, 2007) Rubin and Rubin (1995) point out that participants are more likely to share their stories when they believe the researcher is sympathetic to their experience.

Prior to conducting the one-on-one interviews, a focus group interview was used to test the research questions. A total of three environmental educators were chosen to participate who had experience teaching about the Ojibwe in a nonformal environmental education setting. Similar steps were taken to ensure confidentiality and all three participants signed a consent document. After the focus group interview, final interview questions were modified in content and order.

Participants were sent the interview questions prior to the actual interview, which allowed for more preparation in participants responses. All interviews began with an informal

conversation about the interview process itself and participants were given time to ask questions about the study.

The interviews lasted between 45 minutes to 1 hour in length and were immediately stored on a password protected computer file. Two audio recording devices were used to ensure the dependable collection of data. Loose notes were kept during the interview. Following each interview the audio recordings were transcribed verbatim using a free audio software tool called Transcriptions. The text was then copied and pasted from Transcriptions into a Word document. Actual names of the participants were omitted in the transcription process and replaced by a pseudonym.

Interview Questions

The interview began with a few introductory questions about the participants experience relative to the phenomenon. Subsequent questions addressed concepts that were found in the literature and broader questions related to content and practices that could minimize and maximize learning about the Ojibwe. The final question served to synthesize key points made throughout the interview (See appendix A).

Data Analysis

Using a structured method of analysis outlined by Moustakas (1994) the data was analyzed using the Stevick-Colaizzi-Keen method. I found Creswell's (2007) summary of Moustakas' method to be particularly helpful as a novice researcher. Using the verbatim transcripts from each participant's interview the following steps were taken:

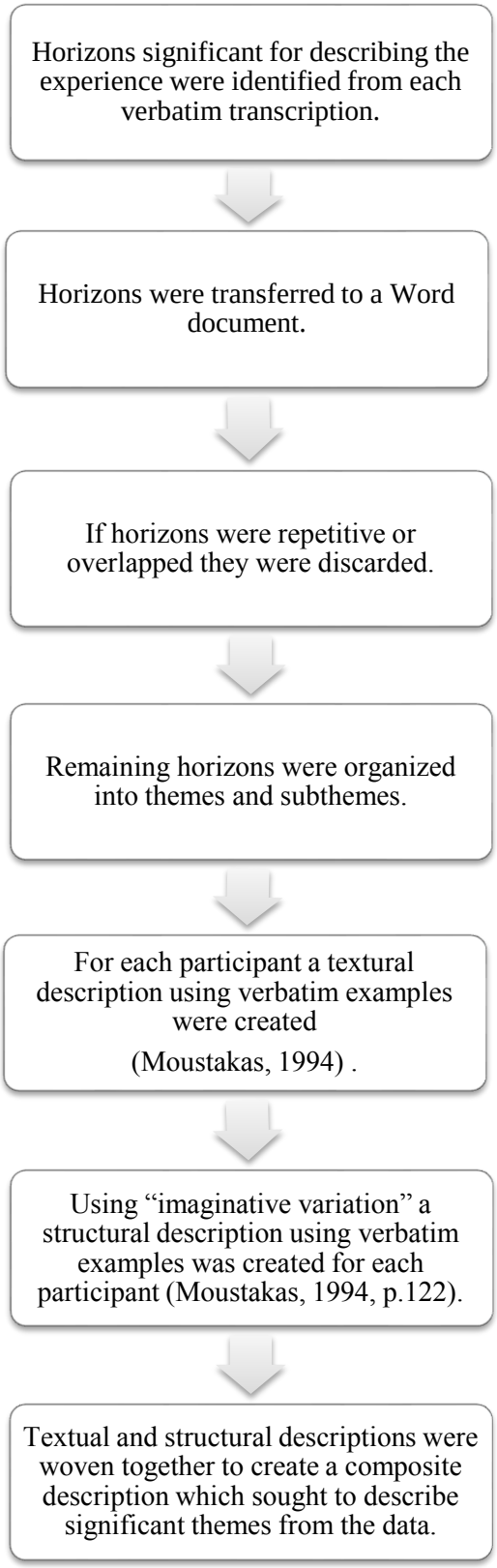

Figure 1. Data Analysis Procedure

Examining the Process Further

Moustakas (1994) describes horizons as statements through which discovery and possibility are unlimited. They are "unique qualities of an experience, those that stand out" (p.128), indefinite and have equal value. Each horizon grounds and provides conditions of the phenomenon from a participant's conscious experience thereby revealing essential qualities about the nature of ones mind.

To determine whether an expression can be identified as an invariant constituent, each expression was assessed using two questions: 1) "Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it" (Moustakas, 1994, p121). 2) Can it be labeled and abstracted?

All expressions that met these conditions were abstracted from the verbatim transcriptions and placed in Word document titled *Horizonalizations* (Moustakas, 1994). For reference purposes each expression contained a times stamp that corresponded to the original transcription.

Once *horizons* were complied for each participant individually, horizons were reviewed to "understand the content and complexity of the meanings, rather than frequencies" (Smith & Osborn (2003) p.66). Non-repetitive and non-overlapping constituents were tagged by their relevance to teaching and learning about the Ojibwe and content and practices that maximize and minimize learning about the Ojibwe. "Tagging refers to the process of selecting from an amorphous body of material, bits and pieces that satisfy the researchers curiosity, and help support the purpose of the study" (Baptiste, 2001, p.10).

All horizons were coded, organized, defined, and redefined until they settled into themes and subthemes. Colleagues peer-reviewed the themes and subthemes before the textural and structural analysis occurred. Themes and subthemes were modified based on the suggestions and insights of colleagues the data was entered into three Excel spreadsheets. The spreadsheets served three distinct functions: 1) to provide definitions for theme and subtheme categories and document their corresponding code numbers; 2) to insert all coded subthemes onto one document that could be filtered; 3) to filter like-subthemes across all data to generate patterns of frequency.

After themes and subthemes were established a synthesis describing the " textures of the experience" (p.122) was created for each participant. Moustakas describes the process as "explicating the phenomenon, qualities are recognized and described; every perception is granted equal value, non- repetitive constituent of the experience are linked thematically, and a full description is derived" (p. 96). For this process I used verbatim examples to describe in paragraph form the "what" or "facts" of participants responses.

While the textural description involved identifying the "what" the structural descriptions sought to describe the "how" or feelings underlying what was described. "The structures are brought into the researchers' awareness through imaginative variation, reflection and analysis, beyond the appearance and into the real meanings or essences of the experience" (Copen, 1993, p.65). Imaginative variation is a process of moving from fact to ideas and exploring ones intuition about a phenomenon. In the imagination, "anything whatever become possible" (p.98) and means and essence are explored. "Through Imaginative variation the researcher understands that there is not a single inroad to truth, but that countless possibilities emerge that are intimately connected with the essences and meanings of an experience" (Moustakas, 1994, p. 99).

The final step in the reduction process involved creating a composite of the structural and textural descriptions for all participants. This unified description explores the qualities or essence of the experience of participants as a whole. As the essence of participants experience can never be totally exhausted, Moustakas (1994) believes the composite represents a "particular time and place from the vantage point of an individual researcher" (p.100). In other words, what is found is something quite open and indefinite but drawing closer to meanings common among participants and identifying possible qualities or conditions that underlie the shared experiences.

Validation and Reliability

Husserl (1970) believed that we carry out the reduction process from our own viewpoint of the world (p.253) and suggested that researchers check with others in order to move closer to a more complete analysis of what is observed (Moustakas, p.95). "We penetrate deeper into things and learn to see the more profound 'layers' behind what we first thought to see" (Kockelmans, 1967, p.30).

The researcher asked three colleagues to examine the themes and subthemes created for each participant's data set. These peer reviewers keep the researcher honest, asked difficult questions, and provided an opportunity for the researcher to talk out her thoughts, concerns or insights regarding the data (Creswell, p.208, 2007). Furthermore peer reviewers provided an element of external stability due to the highly interpretive nature of the coding and theming process. For example they examined the data before it was grouped into themes and subthemes and were asked to assess whether passages accurately reflected the codes they were given.

Out of this process several important recommendations emerged. One colleague suggested that themes and subthemes needed to be transferable across data sets so that meanings or essence could be analysis as a totality. Another colleague asked important questions about the nature of "experiences teaching and learning about the Ojibwe" and suggested that some of the horizons did not reflect teaching or learning about the Ojibwe specifically but rather teaching and

learning as American Indians. A third colleague examined themes and subthemes and deleted over-lapping and repetitive meanings and inquired about the meanings themselves. It was brought to my attention that some meaning units did not sufficiently contain a moment of the experience that could help understand it or help support the theme under which it was placed.

Summary

To explore the beliefs of American Indian practitioners, a phenomenological methodology was used. This study followed Moustakas (1994) transcendental phenomenology and sought to understand the common or shared beliefs about teaching about the Ojibwe and the meaning that participants attribute to their beliefs. This approach recognized that individuals experience and interpret events differently and how individuals create meaning about their experience constitutes reality.

Smith and Obsorn (2003) capture the strength and challenge of this approach by stating "not only are participants trying to make sense of their own life world, but the researcher is trying to make sense of the life world from the perspective of the research participants" (p.53). Due to the highly interpretive nature of the reduction process, the researcher engaged in conversations with multiple colleagues. The structural analysis found in the following chapter is an intuitive imagining of the researcher herself and is best understood not as a single truth but as the experiences of participant's through the lens of the researcher.

CHAPTER FOUR
DISCUSSION OF RESULTS

The purpose of this phenomenological study was to explore the beliefs of American Indian practitioners on teaching about the Ojibwe in a nonformal environmental education setting. The following questions guided the collection of data for this study.

- What experiences do the practitioners have relative to teaching and learning about the Ojibwe?
- What content and practices could maximize and minimize learning about the Ojibwe?
- What is my position on teaching about the Ojibwe after reviewing the sources of evidence and literature?

The research findings are presented in three distinct sections. Section one provides textural themes and subthemes from the data, looking closely at the experience of teaching and learning about the Ojibwe. Using imaginative variation (Moustakas, 1997), section two offers themes unique to participants individually and looks closely at the wisdom found in their personal experience. Lastly, in light of the literature and research questions, unexpected subthemes will be presented.

While the accumulation of all participants' data yielded one or multiple quotes within a particular subtheme, according to Moustakas (1997) meaning units have equal value in terms of essence and meaning. Therefore, subthemes may have one or multiple corresponding quotes but in general frequency does not mean greater importance.

Significant Themes and Subthemes

The first two themes of this study involved experiences teaching and learning as an American Indian. This became a significant theme as practitioners frequently described their experiences as teachers and students. Significant subthemes that describe the experience of teaching and learning as an American Indian include: family, formal education, identity, cultural environments, and outdoor skills.

Experiences Teaching and Learning as an American Indian

Table 1

Significant Statements about Family

Theme	Subtheme	Exemplary Quotation
Experiences teaching as an American Indian	Family	I hang out with my nieces and nephews and I show them what I know and I show em how to build certain tools, what to use, when to do this and that. And like my nephew is 14 now and he knows how to do everything in the sugar bush. He knows how to do everything as far as wild ricing is because he hangs around...me and my brother who actually do that right in front of him (Arnold). I think in nonformal settings, I always go to my children...a lot of what we do with them is outdoors... so whenever were out we are always identifying plants and I think that's just the way kids learn is just [you know] I think the parent can teach them a lot (Netta). When you go into somebody's house, you respect their rules. You're on your best behavior...I try to communicate to my kids when we go out in the woods, this isn't our place. It might have been at one time but it's not our place anymore. You keep your voice down; you build a small fire (Frank).

Family. When asked about nonformal environmental education, participants spoke about teaching their nieces, nephews, and children. Examples of teaching family include outdoor skills such as gathering wild plants, gardening, hunting, fishing and modeling environmental and spiritual values (Table 1). Learning from family was a commonly shared experience growing up, suggesting that teaching members of ones family is a necessary component of nonformal environmental education.

Arnold described nonformal environmental education as "Going out and experiencing things" rather than something that is done in a traditional classroom. While he believes that learning in a formal setting is helpful for certain things, "Getting out there and experiencing stuff is just so much more important" especially when it comes to teaching "children and grandchildren."

In addition to their experience of teaching family, participants shared how they had learned from members of their own family when they were children. Frank shared that while growing up hunting and fishing with family, the central feature of the activity was being together. “So I grew up where hunting and fishing was a family pursuit and I'm talking about, this is how I got to know my uncles and my aunts...that’s one aspect, that it’s about being with family, learning family is number one.” As a young girl, Netta described learning about her culture while attended powwows with her mother and hearing stories that centered around the environment. For the majority of participants, nonformal environmental education is a product of being with family and learning cultural norms and practices.

Formal education settings. The professional expertise of practitioners in this study was a valuable contribution for examining formal settings because three out of five participants had experience teaching or administrating in formal classrooms. A common sentiment held among these participants was how their instructional approach or beliefs about formal education was different from the norm. Moreover, four of the five participants critically questioned the development and delivery of social studies standards to teach about the Ojibwe.

As a social studies teacher Pete taught history and shared how his version was “Very, very different” than the standard lesson plan. Netta described her frustration with the portrayal of Native Americans in mainstream education. "They’re is still there still telling the same wrong story about Columbus and why we still celebrate Columbus Day is beyond me.” These experiences have led a few practitioners to be more conscious about the kinds of information being taught in formal settings. In Netta’s case, it has led her to be more aware about the information her children receive in school and her personal responsibility to educate her children at home.

Only one participant spoke about teaching environmental education in a formal setting by inserting environmental issues and perspectives into his lessons. Frank does this because he finds value in connecting local environmental issues to history and literature content. “The text book doesn’t tell me to do it but I see a great opportunity to talk about the mining, this is a great parallel here (Frank).”

Table 2

Significant Statements about Identity

Theme	Subtheme	Exemplary Quotation
Learning as an American Indian	Identity	It's almost like I process to be Native and accept who you are (Cadence).
		You know being Native is hard I guess is what I like to say, it's not easy, racism is hard, being Native is hard. You're trying to walk in two different worlds so there are some Natives that try to just walk in the white world to try and assimilate...its a journey that we all go through that we have to figure out, how do we walk in both worlds and honor ourselves as two different kind of people (Netta).

Identity. Coming to accept one's Native identity was a common experience among participants. A few described their experience as a journey or process, something that every Native person must go through (Table 2). For instance, Netta describes living with a mixed identity as "Trying to walk in two different worlds." She spoke about the challenge that comes with honoring both her identities.

Another feature of identity involved feelings of anger. Two participants described anger as something that is shared among Native American people and not unique to their individual experience. Pete described growing up during the American Indian Movement and how his feelings and anger have changed over time. "I went through, like a lot of people, I went through sort of anger. The anger phase where [um] you know I grew up in a during the time during the American Indian Movement...I had some pretty strong views about all that and I think age has a way of mellowing me out about things like that. I don't blame anyone anymore, people about history." Participants' acknowledged how their journey with identity is not unique to them as individuals, which suggests that coming to know ones identity is a part of a much larger historical journey.

Similarly, Netta spoke of the transformative aspects of anger, that it fuels the 'passion' Native people have about their history and identity. "We are here today because we are survivors because (when) you learn the history you'll know that they were really trying to assimilate us and kill the Indian in all of us...they won't understand why Indians get angry or Indians have a lot of passion is what I call it." A significant feature of learning as an American Indian is learning how historical and social events continue to shape and define who they are as Native people.

Table 3

Significant Statements about Cultural Environments

Theme	Subtheme	Exemplary Quotation
Learning as an American Indian	Cultural Environments	I took my bike around and you know when you move somewhere you check out the neighborhood and I seen all these Natives because we moved into a mostly Native neighborhood and [uh], I ran back home and said 'Mom!' I said 'There's a whole bunch of Indians' I said 'And they look just like me' and that was like, my world got bigger when we moved to Green Bay because the whole big'o rez was there you know (Cadence).
		Traditionally my [um] Daga, which is my uncle, who also has passed away, he used to [um] we use to always meet up at the powwows which were twice a year in Black River Falls and he would sit around the fire and tell us stories and often times the stories had to do a lot with the environment (Netta).

Cultural environments. Exposure to Native American cultural environments offered participants the opportunity to learn language, traditional skills, and in Cadence's case, learn that there were other people who looked like her (Table 3). As Pete described simply, "I grew up on the rez so you learn [um] Ojibwe things just being in an environment like that." Additionally, experiences in cultural environments gave meaning to participants later in life and informed their beliefs about social and environmental issues affecting the greater Ojibwe community.

For example, Arnold identified two reasons why he has learned so much about Ojibwe traditional ways. First because of his innate desire to learn and second because he learned by being around traditional people who riced and gathered medicine. Netta attended powwows in Black River Falls with her mom, a fluent Ho-chunk speaker and spoke fondly of listening to the Ho-chunk language at ceremonies. She learned a great deal about Ho-chunk cultural views about the environment from being exposed to cultural activities like powwows.

Frank spoke about the condition of reservations to support his belief about the inaccuracy of environmental educational content. "But that that conflicts with what a lot of these people are teaching in their environmental class is that you don't want to be like the Indian...they're just throwing trash out there, it's terrible and it's embarrassing to go up there." His experiences in cultural environments like reservations have led him to critically question the portrayal of Native American environmental behavior.

Outdoor skills. For a majority of participants, hunting, fishing, and gathering were common occurrences growing up. These skills were described as both activities of outdoor living and qualities that demonstrate a characteristic of Ojibwe life. Most frequently, participants described the physical demands needed to carry out these practices.

For instance, Cadence said, "It wasn't like [um] like this is your culture, this is what you do. It was just like this is what we are going to do to go get food. We weren't doing that because we are Oneida or Anishinaabeg, we were doing it because we were going to go get some food." Similarly, Pete shared how growing up fishing and harvesting wasn't considered a treaty right until the issue became political. Rather it was simply a way of life, " It was something we did...it wasn't a unit we studied."

A significant characteristic of learning outdoor skills is how participants described the physical demands needed to carry out such practices. For instance, Frank's children have learned how to rice and "They know how much hard work it is...it's one thing to gather it, it's an entirely different thing to processes it." Similarly, Arnold spoke about the rewards of his hard work when ricing or syruping. "So it's a lot of hard work but it's also, it pays off... there are certain times where you know it doesn't matter what your doing you drop everything and you go do it."

In contrast, Cadence recounts a conversation she had with a friend in which the difficulty of outdoor living was described as a distinct characteristic of being Ojibwe. "I said 'Hey are you going netting?' and she said 'No I'm not going netting' she said 'God everything we do, everything us Shinaabs do is hard, it's either cold or it's hot or it takes a lot of time to get it done and its hard work everything that we do'." While these skills are intimately connected to cultural and traditional ways of life, they are described as both activities of active outdoor lifestyles and as qualities that make up an Ojibwe character.

In terms of teaching outdoor or traditional skills as program content, the potential for misrepresentation was brought to attention. "So then they go and see a Native dude out in the woods and...he's using a gun instead of a bow and arrow and he [uh] is using gas or some other kind of accelerant to start a fire, he's got a gas stove, you know, there's a danger there (Frank)." Frank's concern is rooted in whether educators are willing to teach how Ojibwe people engage in hunting and fishing today using modern tools and technology. By omitting contemporary outdoor practices, the potential to reinforcing romanticized Indian images remains.

Experiences Teaching and Learning about the Ojibwe

The third and four major themes of this study involved experiences teaching and learning about the Ojibwe and a significant subtheme involved the use of oral stories. Additionally, practitioners described how they use oral stories and written materials to learn more about aspects of Ojibwe history and culture that are most interesting to them.

Table 4

Significant Statements about Stories

Theme	Subtheme	Exemplary Quotation
Experiences teaching about the Ojibwe	Oral Stories	But at least she taught me and shared some of the stories that she learned from Elma and passed those on to me and that's how I teach; (I) try to teach about some of the plants (Cadence). I started off very early doing [um] formal interviews, the old tape recorded, cassette tape recorder, interviewing elders, Fond du Lac elders mostly. Because I was collecting oral histories (and) started that as soon as I got out of college (Pete).
Experiences Learning about the Ojibwe	Oral Stories	I heard this story from an elder which, you know, I can't attest to the truthfulness of it but it sounded really good when he was telling me about it. He said our people use to hunt big buffalo and big beaver and wooly mammoths and he said we got greedy and we ate em all and now there's none left. So we went for a lot of years of famine, starvation, and famine and after that we learned that we actually have to take care and nurture what's around us. We just can't go out and whole-heartedly butcher everything and cut down everything. He said after that, that's when we learned how to take care of our environment around us (Arnold).

Oral stories. Participants use oral stories to teach about the Ojibwe and play an active role in documenting oral stories for research. These oral stories were typically passed from elders, friends, or found in written materials.

As an ethno-botanist, Cadence describes learning about traditional plant knowledge from books, peers, and through interviewing elders of other tribes. For example, when she met Anishinaabeg people from Turtle Mountain she was shocked to discover that they did not use wild rice. "You don't have any rice out there! Well how can you be Anishinaa(be)?" Learning about other tribes led her to surprising discoveries about what it means to be Anishinaabeg.

Pete spent many years collecting oral stories from elders and using these stories to document the history of tribal communities (Table 4). As an avid listener since he was young, he has observed that oral histories are as diverse and numerous as the people who tell them.

In addition to teaching using oral stories, participants shared traditional stories with me during our interview. These stories illustrated concepts and ideas about the Ojibwe and the environment and were particularly useful for supporting their own cultural beliefs (Table 4).

Three participants shared experiences gathering oral stories from elders, all of which involved aspects of traditional environmental knowledge. The interest in gathering and documenting Native history suggests that these practitioners are not just students of Native knowledge but active writers and historians of a living Ojibwe history. This was best illustrated by Arnold's story (Table 4), which described how the Ojibwe learned to hunt and harvest in a sustainable way.

Similarly, Netta described how she studied traditional environmental beliefs from elders after a recent flood impacted her community. While working on a cap study to examine how individuals responded to the flood she learned that natural disasters are "Just the natural cycle of life...it's going to happen again but you wont know when it's going to and that's the uncertainty of it right." By listening closely to the beliefs of elders, she learned how uncertainty was a characteristic of environmental thinking.

Table 5

Significant Statements about Written Materials

Theme	Subtheme	Exemplary Quotation
Learning about the Ojibwe	Written materials	And going to your basic everyday ordinary school um the only picture besides my family that I had of Indians or Natives was a guy crouched down behind a bush in my social studies book, my history book and he had on a breached cloth and he had a bow and arrow and he must have been getting ready to hunt something (Cadence).
		That's why as a Native American its up to me to teach my children the truth, um, and have those discussions when they come home about things that may not be accurate in some of the books they have (Netta).

Written materials. Participants frequently referenced information found in written materials such as books and expressed diverging beliefs about the credibility and usefulness of such sources.

In the case of learning about Native people in grade school, Cadence recalls how images of Native Americans in her social studies text were crude and simplified (Table 5). Similarly, Netta expressed concern for the information her children receive from text books and believes it is her responsibility to teach them the information that they don't learn at school (Table 5).

Using books to access traditional and historical knowledge was a common experience. For instance, Cadence consults books to learn more about plants even though she "Was told by an elder that you can't learn about plants from a book." In pursuing historical research, Pete has learned about the Ojibwe by "Looking through a lot of picture albums and trucks with papers and pictures and things like that." Arnold referenced what he learned from reading William Warren's book on the *History of the Ojibwe People*, and suggested it as an interesting historical text. "That book was filled with racism...it's a really good book, it's probably one of the best historical books out there." Depending on the personal interest of the practitioner as well as the source and purpose of the material, using books to pursuing cultural and historical knowledge was a common feature of learning about the Ojibwe.

Content that Could Maximize and Minimize Learning about the Ojibwe

Participants identified specific educational content that could aid in learning about the Ojibwe. These content areas include: cultural, past and present historical knowledge, values and beliefs, environmental issues, and tribal sovereignty. Specific content that could diminish learning include: misrepresentation of Ojibwe people and religion.

Table 6

Significant Statements about Cultural Knowledge

Theme	Subtheme	Exemplary Quotation
Content that could maximize learning about the Ojibwe	Cultural	I talked with some of the elders and talked to them about what they think is important to teach and where they were at was language is the most important thing to teach (Arnold).
		I think understanding the seasonal camps... getting back to health issues and that type of thing. I think, you know, if you could teach about the seasonal camps and how [um] traditionally we ate and we hunted and gathered and we exercised and now we have become a different society and so as Native people we are becoming more unhealthy because of these changes. So I think teaching some of that is very vital to understanding, you know, the demise of a lot of our health issues here that are going on within all of society (Netta).

Cultural knowledge: language, plants and seasonal lifestyles. Cultural knowledge pertaining to language, the sacredness of plants, and season lifestyles emerged as significant topics for teaching about the Ojibwe. For instance, language was viewed as central to understanding the physical environment and significant for cultural preservation. As Netta explained, "First thing is always language... I don't think people understand that once a language is lost by a band or a tribe we don't have a home land to go to" and that by learning the Ojibwe language we "Can better understand the environment."

Although language is viewed as a way to unite Ojibwe people, Arnold believes that it still remains inaccessible for the majority. He shared how his opinion on this issue differs from that of his elders. "There's only a hand full of real speaker people are absolutely fluent in them... so there's nothing else to unite all the other million plus people who aren't part of that." Instead he suggested that when teaching about the Ojibwe, educators should focus more on culture. "I think culture is ever bit as important but the old timers what they always say is language. Without language there is no culture and so I see that and I see just like the way the Ojibwe language is (Arnold)." Other key topics having to do with language include understanding that there are a

variety of Ojibwe dialects, spellings, and pronunciations that occur depending on the location of a tribe.

Teaching students about seasonal lifestyles was another significant feature of teaching cultural knowledge. This includes the belief that traditional camp life helps us understand the challenges that affect Ojibwe communities today while demonstrating how Ojibwe people have adapted to a changing social environment (Table 6). Physical survival and the relationship between outdoor practices and seasons were important features of teaching about traditional lifestyles (Table 6).

Three participants discussed the importance of teaching students about plants and referred to this topic in a variety of ways such as: traditional ecological knowledge, food and medicine, and sacred products. By teaching about plants, student may gain a holistic picture of traditional Ojibwe beliefs as plant knowledge contains spiritual and environmental teachings. For instance, Arnold described how he honors his spirituality by respecting and caring for wild rice; “One of the things I grew up hearing and I still hear occasionally is that you don't sell medicine and wild rice to me is a spiritual medicine. Like to me it like makes me feel really good inside so if somebody need wild rice I'll give it to him but I'll never sell it.”

Table 7

Significant Statements about Past and Present

Theme	Subtheme	Exemplary Quotation
Content that could maximize learning	Past and Present	You know they learned the general skills from who ever came before them but the specific skills they are constantly adapting. So I guess learning about it is important and just kind of getting in touch with those people who came before you. But present is everything because we live in a different world then they did (Arnold). I think that any educator needs to do a mix of both. They need to teach the history and they need to teach the current, where we are currently (Netta). If you even ask Native kids now days to draw a picture of an Indian they'll draw a picture of an Indian with feathers and paint on their faces (Pete).

Past and present. When asked about the tendency of environmental education to focus on the historical past, a number of participants believed that it is important to balance past and present representations of Ojibwe people (Table 7).

For instance, Cadence offered an example of how past and present cultural knowledge manifests for the practical needs of processing wild rice. "Yeah you should talk about the past. This is how, yep this is how we did it, this was the sustainable method but here is the reality of it. If we are going to feed our community we need a great big processor, you know for the rice and stuff."

Pete offered an alternative perspective to the issue, asserting that a glorified past perspective isn't unique to non-Native or "environmental people" (Table 7). Put simply, the idea that Native people were "wonderful bunny huggers" is a stereotype that educators need to be careful with. What he proposes instead is for educators to focus on how Ojibwe people engage in environmental practices, lifestyles, and issues today.

Table 8

Significant Statements about Values and Beliefs

Theme	Subtheme	Exemplary Quotation
Content that could maximize learning	Values and beliefs	We lived within the environment and then once the Europeans got here the Europeans were kind of living above the environment. You know, in stockades like at the national monument. So they were separating themselves while we were living in it (Arnold).
		You know its that difference in thinking it's different than that sportsman mentality. You know, where fish and game are regarded as resources and being in the environment is things to harvest. It's just a fundamental difference (Pete).

Values and beliefs. Four distinct subcategories emerged pertaining to Ojibwe values and beliefs: comparing Native and non-Native thinking, tribal specific beliefs, traditional beliefs, and environmental beliefs.

Pete believes that Native and Western thinking shapes the language used to describe the environment (Table 8). For instance, the separation between spiritual and non-spiritual aspects of the world is different than an Ojibwe cultural worldview. "Westerners have decided that there is this rational world and its separate from the spiritual world." Similarly, Arnold spoke of how these differences in thinking led to the physical manipulation of the environment (Table 8).

Another significant feature of values and beliefs was the understanding that not all Ojibwe people share the same beliefs. Pete put it, "I think depending on the tribe there are certain fundamental parts of a belief system." Likewise, the importance of where Native people come from is deeply tied to their understanding of who they are, their beliefs, and their personal and ancestral history. "You know, the Native people are the first ones to identify their Lakota you know from a rose bud, they're an Anishinaabeg from White Earth or Red Lake, their Menomonie from down in Wisconsin. That speaks to their understanding that they're sovereign people." As a result, teaching students about the diversity of personal and tribal perspectives is one potential way to increase knowledge about Ojibwe beliefs and values.

Participants used the words humility and truth to exemplify core values or essential ideals shared among Native American people. For example, Netta said; "I don't think Native Americans you know traditional true spiritual type Native Americans aren't the kind that go around and try to get credit for things." Additionally, these cultural values are reflected in traditional stories.

Arnold addressed the importance of teaching stewardship and modeling responsible environment behaviors. His ideas were strongly supported by his spiritual belief system, asserting that "Whatever you need Gitche Manitou provides." With the physical abundance of nature comes a moral and spiritual responsibility and one way of honoring one's spirituality is to harvest or gather in a sustainable way. Another spiritual principles guiding Ojibwe stewardship is the idea that everything has a purpose. "If your not going to use it for that purpose, don't use it" (Arnold). Understanding how to care for the things that provide food or medicine teaches students respect, "Because if I go out there and harvest every little bit of medicine...that I could find out there, well I kind of just screwed over everybody else (Arnold)."

Table 9

Significant Statements about Environmental Issues

Theme	Subtheme	Exemplary Quotation
Content that could maximize learning	Environmental Issues	To Ojibwe people who still know their cultural teachings, you know, that's just a horrible thing... our teaching says that whatever happened to the wolf will happen to us (Pete).
		It completely collapsed at the start of the 80's and (by) the start of the 90's there wasn't a walleye to be had and it wasn't the white guys up there fishing the lake, it was the Natives (Frank).
		That's the reason all the Ojibwe people are here, is because of the wild rice...we fought the Sioux for a hundred years over this rice (Arnold).

Environmental issues. When asked about social, political, or cultural issues pertaining to the Ojibwe that could be useful for environmental education programming, four distinct topics emerged: wolf hunting, mining, fishing/spearing, and land use.

All seven Ojibwe bands forbid wolf hunting on tribal land and Pete suggests that a difference in thinking, rooted in cultural and spiritual views of nature, have led to an on-going misunderstanding about the issue of hunting wolves (Table 9).

Differences in thinking emerged again during a discussion about the 1854 treaty area. Arnold believes that Ojibwe people "want to be a part of the environment" by accessing their treaty land but that "Europeans, not all of them, but a lot of them, especially the ones that have a vested interest in mines and money and timber sales, they have a different perspective on it. So they want to get what they want and I want to get what I want and they absolutely can't necessarily get along." Despite the belief that differences in cultural thinking can lead to greater

misunderstanding on environmental issues, participants suggest that compromise plays an essential role in finding solutions that benefit all communities.

Calling attention to the management of the environment on reservations, Frank debunked the idea that Native people are invariably moral by offered the following example (Table 9). Supplying Red Lake walleye to local restaurants in places like Duluth completely devastated the walleye population on the reservation but through mutual effort between the Department of Natural Resources and the Red Lake tribe, the population bounced back.

Three participants identified mining as a significant Ojibwe environmental issue. Frank described how Native people camped at mines in Wisconsin because of their legal stake in the outcome and not because "they are not just a bunch of tree huggers." He believes that since many people will benefit from the mining industry, it is unrealistic to shut down mining all together. Weighing all sides of the issue, including the diversity of Native viewpoints on mining, is essential for teaching about these issues. Simply put, "You can't just teach it from one point of view (Frank)."

Arnold pointed out that there is a deep historical context to the issue of mining and in particular, the effects of mining on Native rice beds (Table 9). His beliefs about mining are supported by his tribal history and his personal experience witnessing the effects of agriculture on the lakes where his family lives. "They trenched out a lot of the old rice lakes, they filled them in, they drained them and they grow crops there now...all those crops are feeding into those ditches which feed into the lakes. The rice crop isn't near what it used to be, even back when I started ricing." Like Arnold, many participants shared first hand accounts of how environmental issues shaped personal and political events in their communities and expressed how environmental issues are interwoven in cultural beliefs regarding the environment.

Table 10

Significant Statements about Tribal Sovereignty

Theme	Subtheme	Exemplary Quotation
Content that could maximize learning	Tribal Sovereignty	Natives are unique in that they are sovereign. So things like this inability to see individual tribes as nations has a lot to do with why these people, these non-Native people get so upset about treaty rights... I think it's really important that if you're going to talk about [um] Natives in the public school system treaty rights what they are and what they aren't. And you know it gets back to, you know, the uncertainty. This is an area where it's really not that uncertain. There is certainty in the sovereignty issue (Frank).
		All you have to do is jump in the car and go to Menomonie reservation in Wisconsin...see how that tribe, as an example, has taken care of their original land. They've been there for 8,000 years. (Pete).

Tribal sovereignty. All participants spoke about the importance of teaching students about tribal sovereignty and specifically how tribes govern and manage the environment and the importance of teaching treaty rights to support Ojibwe cultural competency.

Netta addressed the misunderstanding of treaty rights and how "People don't understand...they totally don't get it" and that "People don't know enough about Native Americans to know the strong environmental programs that tribes have and how they address their own needs." Participants' regarded tribal governments as important content for students to learn when learning about the Ojibwe.

Another significant concept when teaching about the Ojibwe involves teaching "Rights in the ceded territories as far as hunting, fishing and gathering and how we take care of the land" (Netta). Aspects of learning these rights include how tribes co-manage the ceded territories with the U.S. agencies and that there are special laws governing tribal land management.

Pete identified how tribal "Efforts to keep our fish stocked, to manage...to take care of things" can be observed through the work of tribal based environmental programs. He suggests that educators use tribes such as Fond du Lac and Red Cliff as models of successful environmental management.

Table 11

Significant Statements about Misrepresentation

Theme	Subtheme	Exemplary Quotation
Content that could minimize learning about the Ojibwe	Misrepresentation	And I think Indians like the mystic stuff and I think Whites like the mystic stuff cuz they don't want to face the reality. You know what the reality is? It's all the ugliness in Native history (Frank).
		I am one of those people who believe that we've taken a lot of informal cultural knowledge that's probably best taught informally ...we've taken its magic away by making a curriculum out of it. By developing lesson plans and having a birch bark unit. That kind of thing. I mean that's what schools do but somehow in the doing of that we've taken away its power (Pete).

Misrepresentation. A significant topic that was discussed among participants was the potential for misrepresentation of Ojibwe people in nonformal programming. Participants' suggested teaching a balanced account of past and present Ojibwe identities to avoid depicting the Ojibwe as static and unchanging. Representations of Ojibwe people that focus only on the past diminish the importance of a living and adapting Ojibwe culture and may reinforce misunderstanding about socio-political issues occurring today.

For instance, Arnold strives to balance his lessons and interpretive displays to show "The Ojibwe way is not static." Ojibwe people use modern tools and technologies to hunt, fish and gather while also carrying out traditional practices for cultural livelihood. He believes that adapting and changing is essential for personal and cultural development because "We've got to change with the times...things aren't static, things change. You might learn something new, different, better."

In regards to the romanticization of the Native American image, Frank and Arnold believe that mystic representations appeals to both Native and non-Native people equally. According to Frank, we accept this image mystic image because we "don't want to face the reality" of a violent historical past (Table 11). Similarly, he asserts that the 'Noble Indian' is unfounded in both a past and present context and that respect for the environment isn't a distinctly Native capability. Furthermore, the 'Noble Indian' image serves to reproduce misconceptions about modern day practices and can work to affirm the expectation that Native people should use primitive technology to hunt and fish in ceded territories.

Pete believes that standardized cultural curriculum has taken away the power of cultural knowledge, which is best taught informally within cultural, ritual, and family settings (Table 11).

Back in 1990 when Minnesota first began developing their academic standards, he sat on the State Board of Education and has witnessed the development and effects of these reforms on education. Creating units of Ojibwe curriculum to teach to a non-Native core of standards may potential cause a variety of well intentioned but potentially dangerous cultural misrepresentations.

Religion. There are specific aspects of Ojibwe spirituality that, if taught in nonformal settings, could diminish their religious or spiritual meaning. These topics include: spiritual names, ceremonies, and legends.

For instance, Arnold identified the one thing that he feels should never been openly taught about the Ojibwe, religion. " I won't teach them, hands down, I won't, because they are part of a bigger picture that you don't get into with people who aren't apart of that culture." Aside from religion, he feels that "everything is wide open" to be shared in nonformal settings.

Beliefs regarding traditional names differ among Native American cultures but in general, the right to give someone a spiritual name remains a sacred and spiritual practice. Netta explained that " Some of us believe that without that name we don't go...to the spiritual place...it's just something very spiritual and close that we don't even, I don't know, talk freely about." Therefore, talking about the spiritual aspect of ones name, "Is something that should never be played with or taught in the school...this would be one of them that you wont touch."

Similarly, Cadence believes that ceremonies and spiritual stories are content that should not be addressed in environmental education programming and that reenacting traditional ceremonies would be similar to handing out " a piece of fry bread and some grape Kool-Aid" to teach about Christianity.

There are cultural taboos surrounding stories that depict spiritual beings. When asked what the difference between spiritual and non-spiritual stories are, Arnold explained that legends typically involve spiritual beings like Waynaboozhoo and non-spiritual stories "Are just like one day a bear went out in to the woods..." Educators should know that there are regional taboos against telling stories and legends, for instance, that legends cannot be told " Unless there's snow on the ground (Pete)." Some beliefs about stories and legends are regional so "You never know where the cut off is (Arnold)."

Teaching Practices that Could Maximize and Minimize Learning about the Ojibwe

The seventh and eighth major theme of this study involved practices that could maximize and minimize learning about the Ojibwe. Significant subthemes include: oral stories, Ojibwe expertise, and instructional approaches.

Table 12

Significant Statements about Oral Stories

Theme	Subtheme	Exemplary Quotation
Practices that could maximize learning about the Ojibwe	Oral Stories	I have to say that telling the stories are important but...I think that educators should probably give thought to the stories and even ask opinions of Native people about how they might approach that (Netta).
		I don't think they should use stories... I wouldn't use other people's stories. You know. If I did, if I said, there's a little story from Africa, from this tribe in Africa, but I know I can't tell it very well... it applies here (Cadence).

Oral stories. When asked about stories and incorporating Ojibwe stories into nonformal environmental education lessons, thoughtfulness in ones approach should be considered (Table 12). Better practices include: asking the opinions of Native people, understanding context, and respecting cultural and regional taboos.

To Netta, telling an Ojibwe story is not as simple as selecting one that seems to work. Individuals must have the experiences or personal knowingness to tell it. This doesn't mean only Natives can tell a story. " I know non-Native folks that have been adopted into or they marry into and they become part of a community of Native Americans...they may know the stories and they can tell the stories in the language (Netta)." A certain amount of cultural understanding is integral to telling stories and educators who have this cultural knowledge also possess authenticity. They don't act like they know something that they don't. For instance, if "They're just trying to pretend that they know something...that's just wrong (Netta)." On the other hand, Cadence expressed opposition to telling stories as they could easily be misinterpreted and taken out of context (Table 12).

Context is an important part of telling stories as traditional stories involve historical, spiritual, and cultural knowledge. "In telling them our stories as a non-Native in a non-Native audience listening they may not even get the story to tell you the truth because if you don't understand the history you don't understand that, you're less likely to understand the content of the story." Netta explains that these stories connect and build on each other. "It usually builds on something regarding the environment or the spirits or the way that we live and so until you

understand that you're not really going to ever be able to grasp the entire content of the story."

Another example of understanding the context of a story is being aware that tribes have different practices regarding the distribution and documentation of traditional stories. For example, traditional Ho-chunks' believe that their stories should not be written down and used by the general public.

To expand beyond the idea of traditional storytelling, Netta offered a personal experience about acquiring land in Nebraska as the result of government relocation. She believes that having Native American people share their personal stories about historical events would benefit students in formal and nonformal settings. "Having those types of stories retold with documentation to show what this is, what happened, um, I think would be more meaningful to our students than reading it out of a text book."

Additionally, Pete believes that the use of stories could maximize learning as long as the stories are kept culturally appropriate." For example, ceremonial stories should only be told in winter but that environmental and science educators should use Ojibwe stories to teaching Ojibwe environmental perspectives.

Table 13

Significant Statements about Ojibwe Expertise

Theme	Subtheme	Exemplary Quotation
Practices that could maximize learning	Ojibwe expertise	There are many recordings especially for the Anishinaabeg...There are many opportunities online from different tribes who have put out specifically on environmental issues that you could show one a day or one a week or something, during your lesson plan (Netta).
		If your going to talk about the culture that it should be coming from a person who is from the culture. I mean you could say yeah they harvested the rice and they put out asama but that should still come from somebody who comes from that tribe and not every Native person represents what the next Native person does or is (Cadence).

Ojibwe expertise. A majority of participants discussed the importance of having Ojibwe lessons taught by individuals from the Ojibwe culture. Indirect and direct access to cultural expertise was put forth as a model for better educational practice.

There are many different ways to bring Native voices into an environmental program, for instance using online resources, stories written by Native people, or recordings of elders. These kinds of methods could be used to discuss specific environmental issues as there are many tribes who use the internet to voice their position on environmental issues (Table 13).

Pete suggested that direct access to Native perspectives is ideal and could be offered to students through tribal based environment programs and facilities. These local resources offer the greater community an opportunity to see first hand how Native people are working towards a quality physical and cultural environment.

Participants felt that individuals from the Ojibwe culture would be the most knowledgeable Ojibwe instructors (Table 13). At the same time, it was suggested that not all Ojibwe people shares the same beliefs about the Ojibwe. “Not every Native person represents what the next Native person does or is (Cadence).” Whether using direct or indirect Ojibwe expertise, it is important that educators avoid generalizing the beliefs of Native American people and seek out direct or indirect resources that place Native voices and experiences front and center.

Table 14

Significant Statements about Instructional Practices

Theme	Subtheme	Exemplary Quotation
Practices that could minimize learning	Instructional	You have to teach it and you have to get over that that sense that you don't know it...if you don't give them that knowledge then where are they going to get it? You need to get over all that guilt. And all that feeling of ignorance, all of that is, all of that is part of privilege. You know feeling guilty, feeling ignorant is part of that privilege... there's all kinds of white privilege and that's one of them (Pete).
		Often times what they portray is usually their own, I'm going to say their ignorant way of knowing, because they just don't know what they don't know (Netta).

Instructional practices. One of the greatest barriers that can diminish the ability of non-Native educators to teach about the Ojibwe are feelings of guilt and ignorance. These feelings were described as products of white privilege (Table 14) and Pete believes that environmental educators have a great responsibility to provide students with the knowledge that they might not otherwise receive in another setting.

Similarly, Netta believes that denial is prevalent among educators who teach Native American history and that their denial stems from guilt (Table 14). Therefore, guilt and ignorance are beliefs that could be addressed in professional training as they can cause barriers in the delivery of fair and accurate programming.

The perpetuation of beliefs about the Ojibwe is another potential obstacle preventing educators from teaching quality programs. For instance, as a former high school teacher, Netta understands the realities of designing and implementing curriculum in a formal education setting but argues that teachers "don't spend enough time updating" their lessons and subsequently, replicate particular beliefs about Native Americans over and over again.

Table 15

Significant Statements about Social Studies Standards

Theme	Subtheme	Exemplary Quotation
Practices that could minimize learning	Social Studies Standards	They're still telling the same wrong story about Columbus and why we still celebrate Columbus Day is beyond me...when you interview people that are even coming right out of high school they have no clue about Native Americans or the Anishinaabeg and we've got eleven reservations here in Minnesota...why wouldn't' they know that, again, is just wrong and that's one of the frustrations about our education system is what kind of education are they getting (Netta)? These standards can be defined the way they want them to be defined.... all that tells me right there (is) back in the day we ran around with barely any clothes on and hunting and fishing wherever the hell we wanted to. And what do we do today? We drink a lot and we got casinos and we don't pay taxes. So that's that teacher standing there defining saying how she's going or he is going to teach this in the class (Cadence). Well from my perspective anyway, um you know, the standards reflect the same kind of um the status quo, you know? The euro-version of the truth...Henry Kissinger said, the victors get to write the history. They get to write the story. So yeah so the whole purpose of those standards are to maintain the status quo. I think the world is hegemony (Pete).

Social studies standards. Participants expressed skepticism about the ability of educators to teach social studies standards that reflect Ojibwe culture and history accurately and authentically. One reason for this concern was the critical question of whether non-Native teachers could accurately teach about a culture and history different from their own.

For example, as a former grade school teacher and parent of two children, Netta expressed frustration toward the perpetuation of certain discourses of history (Table 15) and believes that social studies teachers portray their own perceptions and values about Native American people. " It's very rare that you'll find a teacher who is non-Native willing to learn the truth and willing to tell the truth about what happened with their history." Similarly, Cadence questions how non-Native educators interpret the standards they are required to teach and suggests that their interpretation could be fraught with misconceptions about Native American (Table 15).

Others questioned the ideology of the social studies standards themselves and how they function to upholding a particular worldview. Pete said, “Well from my perspective anyway, [um] you know, the standards reflect the same kind of um the status quo, you know? The Euro-version of the truth.” Frank described how he teaches students to think critically about worldview by challenging students to think about how and why they have come to view certain things as ‘normal’. He points out that societal norms are shaped by white patriarchy. “It gets down to patriarchy, we are perpetuating this patriarchy, White patriarchy. It may not be a bad thing, I mean there’s got to be some order to this society but the content...where did you learn what’s normal?”

Significant Themes Derived from Individual Participants

While common themes and ideas were shared among participants, the following section represents distinct themes unique to individual participants. It was written using imaginative variation (Moustakas, 1997).

Land relocation. The idea that the forest is a commodity that can be distributed, divided, or withheld is a reoccurring theme in Netta's personal and professional story. Forest removal is a construct that is both literal and symbolic of a greater history between Native Americans and governmental institutions. In terms of education, providing direct access to land is an important component of Ojibwe cultural and environmental education.

The issue of forest removal is best illustrated by an experience Netta had during her career, in which she works on land grants and facilitates conversations between the tribe and the university. The university owns land on the reservation but community access has become a point of contention between the entities. "At one point the researchers put up signs that said 'Closed Research Forest'...they were using such horrible language and I told them that and they didn't listen to me." While the unwelcoming message created enough attention with the tribal counsel and the university chancellor that the signs eventually came down, these actions are suggestive of a deeper history of withholding Native access to land. She describes that in her professional role she is working toward "building a pathway to connect the two" communities. "We're really trying to invite (the Native community) to come out and enjoy this land like they use to."

Like most Native Americans, Netta has a personal history with government relocation. She described how she acquired land in Nebraska that was a part of a government relocation process of moving the Ho-chunk people from their traditional homelands in Wisconsin to land in Nebraska. "When my grandfather died it went to my mother and her surviving sisters and brothers and when my mother died the land came to my sisters and brothers and its been fragmented like that." Netta referred to this situation as just one of many relocation stories happening in the past and present.

Therefore, when asked what practices could maximize learning about the Ojibwe, Netta said: "The biggest thing is to get the kids in the forest...we have to take them into the forest and be with them and show them the environment." In the context of her personal and professional history, the forest represents an aspect of the cultural environment that has been separated and needs to be relearned and brought back into the realm of family and community.

Educated native. Cadence spoke about the conflicting messages she encountered throughout her educational experiences and the paradox of being Native and obtaining a higher education. On one hand, being educated means having to choose between keeping her culture close or choosing a different way of life. On the other hand, she faced opposition no matter which path she chose.

She recalls the messages she received in grade school from teachers about her assumed role as a Native American female. "The messages I received was you don't need to take this math class because you're probably not going to got to college.... you should probably take this night school course for nursing.... because you need to stay here and talk to your family." At the same time, the school's Native advocate pressured her to complete her education at a boarding school. "So even right into the eighties they were still trying to break us up and he was a Native guy that was saying, 'You should get away from your mom and go to this boarding school' and I said 'Can I take my brothers and sisters with me?' And he said 'No'." At an early age, Cadence learned that being Native and educated meant having to make choices that affected her identity, family, and community and that these choices were fraught with conflicting messages.

In grade school Cadence remembers living in a non-Native community and being concerned that she and her cousins might be the only Native Americans left in the world. The only images she received about Native people in school were those found in her social studies text books. The following story illustrates how her peers held misconceived ideas about who she was and the isolation she felt learning in a predominantly white classroom.

> In the fourth grade they took me around and said 'This is an Indian' to the other classroom at Thanksgiving time and they would ask me questions. I would just stand there and they said 'This is an Indian right here'. One of them said, 'Do you live in a tipi?' I said 'No I live on 20th Street in a house'.

Later in life, Cadence attended Haskell Indian Nations University in Lawrence, Kansas, where she was exposed to two hundred or so Native tribes. She got to know "A little bit about a lot of tribes" and tells others that they should go to Haskell and "Learn all the things that you should have learned in high school and that you won't learn at another college." Attending Haskell was the first time in her adult life that Cadence realized "That there was more that I could be doing, they taught me about [um] all the Anishinaabeg writers and I like to write, they taught me about the true history and the way things happened...it was at Haskell that I learned that we were actually a different people and could do something different." In a predominantly Native academic setting, the image she held of herself and her community grew.

However, even at Haskell, if a professor had an attitude of being "big university taught" they risked loosing credibility from students. "They get into that mode and think that's the only way that there is and that we should be that way to.... they tend to either not be liked or they just fail themselves." The failure or success of a teacher was dependent upon their ability to navigate this paradox.

Back at home, Cadence received ridicule from an individual in her community about obtaining a higher education. "There's that stereotype that 'Oh, your gunna leave the rez, leave your community and go get educated' and I was accused of that once.... he said "Oh, you're one of them educated Indians" and it makes you feel bad cuz your not suppose to be that, you're suppose to live up to that stereotype but that's kind of...slowly going away." Regardless of the stereotypes she has encountered, Cadence has come to a firm understanding about what it means to be educated and Native. "You can still maintain who you are as Anishinaabeg or Oneida and still have a degree."

Versions of the truth. As an avid listener, educator and historian, Pete has an interest in exploring different versions of personal and tribal histories. He discussed the subjectivity of truth and how accepting multiple versions of the truth is a fundamental Ojibwe belief. By studying the histories of Native people and their truths, Pete finds a deeper connection to his diverse ancestry and to the stories of others.

While attending university, Pete recalls his professor say "There are many views of reality, many fractions of the truth." This idea continued to resonate with him into his personal and professional life. While conducted research on the Ojibwe and other Native American tribes it was revealed to him that "There are different versions of stories...there are different versions of migrations, there are different versions of which tribes were related, there are different version of words and concepts in the language...and different versions of belief systems." Pete's experience with Ojibwe history suggests that historical and cultural knowledge is shaped by ones personal worldview and experience.

This thinking has also informed Pete's educational practice. As a social studies teacher he shared how his version of history was "very, very different" than the curriculum and considers standards as "the Euro-version of the truth", and form of cultural hegemony that upholds a particular truth about the world. The notion that truth is either singular or plural is reinforced by our cultural worldview and shapes our understanding of our relationship with the environment.

For instance, in the Ojibwe worldview there is no separation between spiritual and non-spiritual forces but in Western society there is a tendency " To separate out thinking of the world as a rational place...it takes a scientific view of things without considering that the world is

inherently more complex than that." In turn, our cultural viewpoint informs our epistemologies of the natural world.

Pete explains how this difference in thinking has caused local misunderstanding on land management issues. He explains:

> Another fundamental difference is that American thinking separates the natural world into resources calling it natural resources which is a fundamental difference in our thinking because we don't see things as resources...that fundamental difference in thinking is why we had so much trouble when we started asserting our treaty rights, our hunting and fishing and gathering rights.

In thinking about the world as fractions of the truth, Pete gains a greater appreciation of the diversity and interpretations of our human experience. In terms of its application for teaching and learning about the Ojibwe, educators may benefit from taking a less fixed approach to history by incorporating different accounts of the same historical phenomenon. Teaching students to recognize that historical events can be interpreted by different people in different cultures throughout history is a practice that could help students acquire cultural and historical inquiry skills.

Blended wisdom. Near the end of our interview, Arnold reached inside his shirt and pulled out a traditional beaded necklace. The craftsmanship was astounding. Thousands of neon orange-colored beads the size of small seeds adorned his neck. At the center was a symbol that looked vaguely familiar. When I asked if he had made it himself he replied, "No, my cousin did. He only charged me three hundred and those things are usually a lot.... I just gave him the colors and he came up with that." Upon taking a closer look I realized that I had seen that symbol before. It was the Klingon symbol from Star Trek! His smile met my surprise. "We speak Klingon with each other."

For myself, an outsider of Ojibwe culture, traditional and modern Ojibwe life seems distinctly different. However, for Arnold, these worlds don't clash. They are woven together effortlessly and he does not express conflict in living out both; his attitude is nonchalant.

When explaining how he gathers the things he needs from nature, Arnold offered up this interesting metaphor: "I love being out in the woods and to me when I go out in the woods I say its like going to Wal-Mart, you know everything you could possibly need is out there, you just need to know where to look and where to find it." Comparing nature to Wal-Mart offers a surprising juxtaposition between Arnold's traditional and modern lifestyles.

For Arnold, learning from the past is important and so is learn how to live in his own Ojibwe way. For instance, the following story illustrates how he practices traditional skills while also trying new and efficient tools to process maple syrup.

> That kettle, we are using (in) that picture up there, that thing was well over a hundred years old. It's been in my family forever. My brother, my younger brother, still uses one but this last year me and my other brother we decided to buy a big evaporator pan. We go through, you know, a quarter of the wood. It works a lot faster. We don't have to camp out at sugar bush anymore and boil it all night. You know, you adapt. My little brother, he still hasn't adapted and he refused to cuz he said this is the way to do it, this is the traditional way...so you should be doing it out with birch bark and hot rocks (laughs).

Learning traditional ways isn't something innately Native, it's a matter of personal choice. Arnold explains, "It's just something that you learn because you want to learn...it really helps to have...a passion for it and actually want to..." Whether a person follows traditional Ojibwe practices or beliefs is a matter of opinion as well. For instance, Arnold shares how he will not sell wild rice because it is a medicine but he has lots of friends and family who harvest and sell rice for income. Even though Arnold's cultural and spiritual beliefs prevent him from selling rice, he does not have a problem with others deciding for themselves.

Poverty. Poverty has an effect on the social and physical environment of the Ojibwe and Frank offered many examples of how poverty affects environmental practices, education, and Ojibwe identity.

Degradation of tribal land was described by Frank as a function of poverty and by examining how poverty effects the physical environment, we must also confront the mystic Indian image. " You can see it out at Leech Lake and you can certainly see it out at Red Lake...they are isolated they are absolutely filthy. The roadside is just filled with trash, just crap and garbage I mean the worst environmental degradation you can imagine...those are Indians doing that to the land. Now how do you explain that, the mystical and mythical Indian...now how do you explain that? I attribute that to poverty." For Frank, the idea that Native people live in harmony with the environment is an idea that needs to be challenged.

While he spoke of environmental degradation found on Native land, Frank does not believe that these conditions are products of Ojibwe culture. Rather he believes that poverty brings about a set of conditions that limit social and environmental development. "In the past before there was alcoholism, before there was poverty, before there was incest, before all that ugliness out on the rez, which to me is a function of poverty. Its not a function of culture, it's a function of poverty."

However, in terms of the economic advancement of American Indians, Frank believes that culture does play a part in the failure to improve a variety of standard of living indicators. For instance, this can be seen in the way cultural values place a greater importance on community cooperation rather than individual achievement. Frank believes that an Indian approach to issues

pertaining to standard of living is "By accepting and being comfortable with the status quo as long as that status quo is shared by the community". One of Franks favorite sayings that his father uses "When he sees someone come into a windfall, when he came to the home I built, when he sees a friend (or) family member driving a new car, is 'Tally ho, there goes the fox'. To me, this statement is a 'good for him' sentiment. But, the fox is an animal that is largely a loner. They live by cunning and opportunism."

In addition to the issue of poverty, Frank believes that Native identity continues to be perpetuated by non-Native culture and society. "We see that in sports mascots, pop culture media...recently, Indian activism is challenging this but the challenge is as much to change the minds of members of the dominant culture as it is Indians." Frank calls us to consider the danger in accepting certain discourses about Native American people without critical reflection or examining the role that dominant culture plays in shaping the Native American image.

Lastly, Frank addressed the effects of poverty on the success of Native students and how most teachers are unaware of how poverty shapes and directs the lives of students. "I work with a lot of them (who) make the mistake of saying, 'Nah, its because he's Indian' and I say 'Nah, man. This is strictly a poverty issue'. So that's another belief... its poverty driven and not...racially driven and there's a whole lot of racial challenges out there." The inability to see how poverty plays a role in student's academic success causes deficiencies in the thinking of educators and reinforces stereotypes about Native American students.

Unexpected Findings

The following subthemes emerged as significant to the beliefs and experiences of participants. These subthemes may offer potential avenues for teaching about the Ojibwe in environmental education. They include: treaty rights, tobacco, and unsustainable environmental practices.

Treaty rights. Treaty rights are more than simply a political issue. Romanticized images of Native Americans hunting and gathering inform contemporary thinking about how the Ojibwe should engage with the environment. Participants spoke about the differences in cultural thinking underlying social and environmental issues related to treaty rights and how teaching students about treaty rights can work toward diminishing inaccurate misconceptions.

Table 16

Significant Statements about Treaty Rights

Subtheme	Exemplary Quotation
Treaty Rights	The biggest thing is our treaty right. People don't understand that. They totally...don't get it and until they understand what the government did to us they will just never get it (Netta).
	Native are unique in that they are sovereign. So things like this inability to see individual tribes as nations is got a lot to do with why these people, these non-Native people get so upset about treaty rights (Frank).
	My students ask why you get to use modern day equipment to go hunting and fishing (laughs). Shoot wouldn't you (Cadence)?

Treaty rights remain a lingering point of contention, a conflict that continues to perpetuate itself, in part, because of a general lack of understanding about sovereignty (Table 16). Frank proposes that if educational programs are going to teach about treaty rights, it is imperative that students learn "what they are and what they aren't."

Stereotypes and images of Native Americans in nature have led to particular assumptions about how Native people should engage in environmental practices. For example, while teaching about the Ojibwe, Cadence recalls how her students asked her whether she uses modern equipment to hunt and fish (Table 16). Similarly, Frank described conversations he has had with a neighbor about the issue. "That's why I get in this the discussion with my neighbor he says, 'Yeah go out and use your bow and arrows or your atlatl or whatever hell you got then, you know, I'd be okay with it but your out there using flashlights to spear (and) metal spears and your out there using modern rifles'." To Frank, the argument that Native people should use primitive tools to hunt and fish is outrageous.

Lastly, Cadence described the political actions Native Americans have taken in order to draw attention to the violation of their land rights. She believes educators should teach about these issues and that "They should stress...that the only way that we got the treaty rights that we have today is because we get arrested. We get arrested, we go to court, we go to court, we go to court, all the way up until they say 'Oh yeah, there are some treaty rights that we signed with them long time ago'."

Tobacco. Tobacco is a significant concept that can teach students how environmental, spiritual, and cultural beliefs are interconnected in Ojibwe epistemology. In non-Native communities, particularly in places where children learn, strict laws forbid the use or possession of tobacco. In Ojibwe communities and educational settings, tobacco is an important tool for teaching students environmental and spiritual values.

Table 17

Significant Statements about Tobacco

Subtheme	Exemplary Quotation
Tobacco	One of the key tenet I've always tried to teach students...Ojibwe and non-Ojibwe...is everything in the environment is a gift and you don't just take a gift without giving something back so that's why at the school over here they grow their own tobacco and so that tobacco is, you know, if your going to go picking berries or go picking flowers you put tobacco down first and then you take it. So you don't take anything, nothing is free (Arnold).
	I showed them and I show other kids and people how to gather and harvest the plants they need for their kinnikinnick, or their asama or their tobacco (Cadence).
	Having traditional folks come in and elders to be able to talk to the youth about how they were taught about their environment and how you respect it um and tobacco and the use, the proper use of tobacco (Netta).

Cadence shared a personal story to illustrate the cultural misunderstanding about the use of tobacco. She recalls a comment made during a Naturalist conference about how Native kids might want to bring tobacco with them while they were outside. A non-Native educator responded to this suggestion by saying, "Well kids aren't allowed to have tobacco so they wouldn't have that" and Cadence replied 'Oh lady you just made the biggest assumption in your life...we've been using asama, which is tobacco, a whole lot longer because the creator gave us the asama to ask for the things that we need'." This situation demonstrates the need for non-Native educators to become more aware of the importance of tobacco as a tool for teaching Native children about the environment.

Four of the five participants spoke about teaching kids how to gather, harvest, or use tobacco properly. For example, Cadence teaches students these skills at a manomin camp (Table 17). Similarly, Netta believes that teaching students about "The sacredness of certain products in the environment*"* like tobacco and rice are important concept to teach students about the Ojibwe. Many Ojibwe schools grow tobacco on site and teach students how to care for and harvest tobacco for ceremonies.

An important part of teaching student how to care for the environment is teaching students how to put down tobacco before they harvest wild plants. Arnold describes why this is an important for teaching sustainability and environmental values (Table 17). Teaching the proper use of tobacco is also important to Cadence who has observed the improper use of tobacco at ceremonial events. She explains that wants to teach kids differently. "You go to the big drum and you see a big huge pile of corporate tobacco on the table and you see the couple of people, myself, who go and put out something that's a little bit more green. So I teach kids about that, havin' a respect in that way."

Teaching kids how to use tobacco properly is not only a cultural and spiritual practice, Netta sees it as a community health issue. While tobacco is a sacred traditional plant, its use and commercialization has "Effected a lot of health issues in Indian country as well (as) non Indian country." Because of the misuse of tobacco, Netta suggests that traditional elders should speak to youth about the proper use and beliefs of the plant (Table 17).

Unsustainable practices. Participants generally dismissed the idea of the ecologically 'Nobel Indian' by sharing examples of how Native Americans have engaged in unsustainable environmental practices.

Table 18

Significant Statements about Unsustainable Practices

Subtheme	Exemplary Quotation
Unsustainable Practices	The idea that that the Natives lived in absolute harmony with the environment I think is absolutely wrong...the Native people they burned, they were horrible practitioners of environmental conservation. They burned whole forests down uh, you know they would drive hurdles of buffalo off the cliffs more than they could ever eat so that you know there's just tons of meat rotting and they able to take away so much. You know they wiped out the beaver populations (Frank).
	He said our people use to hunt big buffalo and big beaver and wooly mammoths and he said we got greedy and we ate em all and now there's not left so we went for a lot of years of famine, starvation and famine and after that we learned that we actually have to take care and nurture what around us (Arnold).
	Native people contributed to the demise of the large mammals that one populated North and South America...(they) engaged in practices that were not necessarily sustainable as well (Pete).

Two participants felt strongly that the environmentally 'Noble Indian' image is a fallacy (Table 18). On one hand, Native American people engaged in unsustainable practices throughout history, for instance, their role in the Fur Trade led to the near extinction of the beaver population in Minnesota. Pete shared a similar sentiment believes that educators need to be careful about reinforcing the stereotypes that Native Americans are "bunny huggers" because there is evidence that Native people contributed to the demise of mammals in North and South America.

To illustrate, Arnold shared a story that he heard form an elder about how Native Americans were never innately noble. Rather, they learned to be more aware of their environmental practices because of the consequences they faced (Table 18).

Netta felt that calling Native people ecologically noble or original environmentalists "would be an extreme in such a way" but that "there is a lot to be said about how we took care of the land." Both Netta and Cadence spoke about the innovation of Ojibwe environmental practices such as the three sisters gardening, the uses of fire, and medicine.

Correspondingly, participants spoke of contemporary examples of how the Ojibwe people engage in practices that are both detrimental and beneficial to the environment. Frank

shared a story about the environmental choices made at Red Lake and how they lost their walleye population due to harvesting. On the other hand, Pete suggested that educators could make use of local tribal resources by bringing students to visit tribes to see their environmental programs first hand.

CHAPTER FIVE
DISCUSSION

This chapter will discuss the findings of the study in light of the results and literature review, as well as summarize the researcher's position after reviewing these sources. Educational implications and future recommendations will put forth for the practice of teaching about the Ojibwe in nonformal environmental education settings.

Discussion of Results

Participants discussed their experiences teaching and learning about the Ojibwe in two distinct ways: experiences teaching and learning as American Indians and experiences teaching and learning about the Ojibwe. Since participants identified themselves as Ojibwe, Oneida, and Ho-chunk: the term American Indian was used broadly. The distinction was made as practitioners spoke about their experiences in a number of settings categorically different from teaching or learning about the Ojibwe.

When asked about nonformal environmental education, participants spoke about teaching their nieces, nephews, and children. Features of teaching family involved outdoor skills such as gathering wild plants, gardening, hunting, fishing and modeling environmental and spiritual values. For example, participants spoke about teaching youth the proper use of tobacco and how this sacred plant is used to model environmental values and behaviors.

The subtheme of family-learning is significant because definitions of nonformal environmental education largely emphasize the word "schooling" rather than opportunities to promote intergenerational experiences in a family setting. For example, Tamir (1990) defined nonformal environmental education settings as "institutions, organizations, and situations outside the sphere of formal schooling: for example, field trips and museum visits, educational television and radio programs and other such activities" (p.34). Relative to the experiences of the practitioners in this study, definitions of nonformal education should seek to include family or cultural settings such as ceremonies or tribal-based environmental programs.

In terms of formal education experience, the professional expertise of these practitioners was a valuable contribution to this study and, in particular, for the examination of social studies standards as they often shape Native American programming in K-12 environmental education. Three out of five participants had experience teaching or administering a formal education setting and a common feature of this experience was how their approach to teaching Native American content was different from the norm. Moreover, four of the five participants critically questioned the development and delivery of social studies standards to teach about the Ojibwe.

Consistent with the works of Cole (2007) and Ladson-Billings (1995), participants were highly aware of the socio-political assumptions underlying standardized curriculum, and they expressed a critical awareness of the marginalization of Native American perspectives in education. This was best captured by Pete's statement: "From my perspective...the standards reflect the same kind of [um] the status quo...the euro-version of the truth." This critical questioning of social status and knowledge suggest there is more to be explored in terms of how the experiences of American Indian educators shape their beliefs as teachers.

A significant method for learning more about the Ojibwe is the pursuit of cultural and historical research and by documenting and recording oral stories. The commonality of this pursuit indicates that practitioners consider themselves both students and active historians of a living Ojibwe history. This is particularly important in light of Wilson's (1996) argument that educators and historians have not attempted to find out how Native Americans would interpret, analyze, or document their own histories. As these practitioners contribute to the documentation of Ojibwe cultural and traditional knowledge, using American Indian resources requires greater academic and nonformal attention.

Not found in the literature review but significant to this study, was the role that oral stories play in constructing contemporary environmental thinking, learning, and teaching for American Indian practitioners. For instance, Arnold shared a story he heard from an elder of how unsustainable practices in the past taught Native Americans to take better care of their environment. The use of oral stories for both teaching and learn about Ojibwe demonstrate how oral stories continue to shape environmental and cultural thinking.

At the same time, participants relied on written materials to enhance their understanding about Ojibwe history and traditional cultural knowledge. This revealed a personal assumption that cultural and historical knowledge would largely be passed through oral sources and that written materials would be viewed as less credible.

According to the North American Association of Environmental Education (2004), effective environmental education involves the use of higher-order thinking and inquiry skills to investigate real environmental issues. Complementary to this objective, participants identified a number of topics that would assist in the teaching of high-order thinking and inquiry as well as real environmental issues affecting Ojibwe communities today. Examples of content that would support effective environmental education include: comparing Native and non-Native beliefs regarding local environmental issues, the relationship between the degradation of the social and natural environment, weighing multiple Ojibwe perspectives about an environmental issue, and visiting tribal based environmental programs for experiential based lessons. Furthermore,

participants suggested topics that align with environmental literacy strategies. These topics involved "economics, culture, political structure, and social equity" (Simmons, 1996, p.1).

As discussed in the literature review, beliefs play a fundamental role in the organization and dissemination of knowledge (Mosely and Utley, 2008) and reflect thinking about the world. Participants described personal experiences to support their beliefs on environmental issues, concepts, or practices and their beliefs were validated by their cultural identity (Deplit, 1995 and Southerland & Gess-Newsome, 1999). This was evident in the subtheme 'values and beliefs' and subthemes on 'oral stories' as participants described ways in which their cultural identity shapes their perception of the natural world (Turner & Pei Wu, 2002).

This relationship was also evident in the 'treaty rights' subtheme. Participants regarded treat rights as significant for addressing misconceptions about environmental issues and practices. They gave personal examples of confronting misconceptions held by neighbors and students about treaty rights and environmental issues that illustrate the disregard of Native American treaty rights and sovereignty. It is my observation that the perpetuation of these misconceptions points to a deeper conflict underlying Western notions of Native American values, environmental practices, and history.

Niemi's (2007) investigation of the Ojibwe's espoused beliefs and actual practices regarding the environment found that "boarding school era, poverty, issues of identity, and language loss and revitalization" (p.13) affect environmental beliefs and practices. All of these topics were raised by participants indicating that the relationship between historical trauma, teaching and learning warrant further examination.

In terms of educational practices, Debbie Reese (2007) described how translating traditional stories into written text is fraught with difficulty and flawed by misrepresentation. Participants in this study offered a hand full of suggestions that could be applied as a better practice framework for using Ojibwe stories in nonformal settings. On the other hand, some participants believed that only individuals with deep cultural knowledge had the proper expertise to share oral stories.

Not found in Reese's (2007) article but evident in this study was the importance of knowing the difference between legends and stories. One significant difference is "stories you can tell year round but legends you can only tell in the winter" (Arnold) and legends typically involve spiritual beings and pertain to religious beliefs and practices. Therefore, the importance of understanding context as well as knowing tribal and regional taboos about stories would be a significant topic to address in nonformal teacher training.

Brune's (1982) survey of Minnesota teachers found that when teaching about Native Americans, teachers concentrate more on lifestyle, material culture, and families and are reluctant to teach topics on value systems or religion. Practitioners in this study felt that content or practices having to do with religion were strictly off limits. However, they frequently discussed the importance of teaching cultural and environmental values and beliefs.

In answer to the questions of who should teach values and beliefs, participants suggested that educators seek out Ojibwe expertise to help develop and direct environmental education lessons. This involved inviting Ojibwe elders to speak in formal and nonformal settings, collaborating with local tribal environmental programs and facilities and accessing Ojibwe stories and perspectives using online resources or audio recordings.

Supporting the claim that the Native American image has been fashioned to fit the pedagogical and philosophical purposes of environmental education (Nadasdy, 1999 and Willow, 2010), participants regarded the image of the ecological Indian as an extreme and inaccurate representation of the Ojibwe's history with the environment. A significant subtheme having to do with unsustainable environmental practices emerged. At the same time, local tribal based environmental programs and resource management practices were highly regarded and suggested as worthwhile models for teaching students how Ojibwe communities engage in environmental policy and practice.

The Researcher's Position

The following summary addresses the third question guiding this study: my position on the topic after reviewing the sources of evidence and literature. It is my hope that these ideas will continue to develop though an ongoing relationship with American Indian practitioners and through my continued practice as an environmental educator.

When a set of fixed or certain ideas about the Ojibwe are presented in environmental education programming, educators reinforce a particular image about the history and the identity of Ojibwe people. This is dangerous because, as Jenkins (1991) points out, "history is one of a series of discourses about the world" and "categorically different from the past" (p.7). In environmental education, it is particularly important that we teach students the skills to make the distinction between the past and history.

This distinction is also important when examining how Native American programming can best be used for teaching environmental literacy. We must think critically about what our intended purpose is and whether our discourse about the past advances students' cultural knowledge or reinforces particular worldviews or stereotypes.

It is my belief that if we are to incorporate Native American programming into the nonformal environmental education, we would best serve the goals of environmental literacy (NAAEE, 2004) by teaching contemporary Ojibwe perspectives on environmental issues. Participants identified tribal sovereignty, treaty rights, and weighing multiple interpretations of a historical event as content that could increase student learning. Surprisingly, the same topics are identified in Minnesota Social Studies Standards, thereby strengthen their relevancy for K-12 settings. By balancing past and present Ojibwe culture and identities, we allow for greater opportunities to teach a diversity of cultural perspectives about the environment needed to make informed decisions that benefit our *whole* community.

Findings of this study touched on the social and educational inequality that exists for American Indian people and how these inequalities can be supported though Western thinking about the social and natural world. Practitioners shared examples of confronting inequality in educational settings and they discussed social barriers having to do with poverty, stereotypes, and identity.

Participants taught me to view guilt and ignorance as products of white privilege and how these feelings can prevent educators from teaching about the Ojibwe with confidence. Not knowing how to approach certain topics in Native American programming is okay, it makes sense as it comes from outside my personal experience. However, remaining uncertain without taking the action to find out can cause indecision. Fear can prevent me from looking closely this uncertainty and reinforcing feelings of guilt and indecision.

I also observed that I organize my thoughts about Ojibwe culture into rigid categories, for instance attempting to pinpoint the difference between Native and non-Native beliefs or the difference between traditional and modern Ojibwe practices. Netta explained that identity doesn't fit neatly into two categories, particularly for individuals who come from mix backgrounds or are adopted into the Ojibwe culture and Arnold taught me how modern and traditional worldviews can be blended together without conflict. These ideas were furthered by Pete's discussion about the fundamental Ojibwe belief of welcoming different 'versions of the truth'. The participants of this study led me to view the boundaries of Ojibwe culture as far greater and less restricted than I previously thought.

Educational Implications and Future Research

As identified by the North American Association for Environmental Education (2011), fair and accurate programming involves " Experts in multicultural education and members of historically underrepresented groups, such as women and people of color, have been involved in the development and review process (p.6)." Since this study sought the beliefs and experiences of

American Indians for the purpose of examining Ojibwe programming in nonformal settings, the findings of study could be used to compare programs that have not sought diverse perspectives for development or review. Seeking out contemporary American Indian perspectives is a vital step for environmental education programming because it supports fair and accurate development while reflecting indigenous epistemologies in content and instructional practices (Hermes, 1995).

Another implication of this study is the shear breadth of social and environmental issues that could support learning about the Ojibwe. These topics are particularly relevant for teaching other environmentally based disciplines. For instance, learning about the Ojibwe can take place in classes pertaining to land management, local environmental issues, plants, lake study, or hunting and fishing. Integrating Ojibwe environmental perspectives into other subjects supports the use of multicultural learning and prevents learning about the Ojibwe from becoming isolated and treated as irrelevant to other disciplines.

Lastly, this study has implications for multicultural and socially critical environmental education because the findings demonstrate that nonformal environmental education can be interpreted differently depending on an individual's cultural background and life experience. For instance, the focus on family-learning as a type of nonformal environmental education and on tobacco as an important educational tool for teaching environmental sustainability and spirituality, reflect key indigenous concepts that could promote multicultural and social critical program content in environmental education programming.

The values that underlie environmental thinking shape our educational practice and policies, and without conscious effort to include contemporary Ojibwe perspectives, we are excluding values and voices that do not conform to a particular view of the world.

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APPENDIX A

INTERVIEW QUESTIONS

1. Tell me a bit about yourself and your background.

2. What experiences have you had teaching and or learning about Native Americans/Ojibwe in a nonformal environmental education setting? (Experiences of your children or grandchildren, if relevant)

3. Some theorists in environmental education believe it is importance to cultivate the ability to recognize "uncertainty." What are your thoughts on this idea of "uncertainty" as it relates to teaching and learning about Native Americans/Ojibwe?

4. I've printed off a few MN social studies standards for us to look at. Which concepts stand out as being particularly relevant to teaching about the Ojibwe or Dakota in an environment education setting?

5. Which social, political, or cultural issues related to the environment do you think environmental educators should address when teaching about Native Americans/Ojibwe?

6. In your opinion what content and practices maximize learning about Native Americans/Ojibwe for K-12 students attending a nonformal environmental education program?

7. In your opinion what content and practices minimize learning about Native Americans/Ojibwe for k-12 students attending a nonformal environmental education program?

8. Some researchers believe contemporary environmental programming casts Native Americans as ecologically Nobel or as original environmentalists. What are your thoughts on this?

9. A popular approach to teaching about Native Americans/Ojibwe in environmental education is to focus on what life was like in the past. What are your thoughts about this?

10. What are your thoughts on non-Native educators using Native American/Ojibwe stories in environmental education settings?

11. What role do you think teacher's beliefs play in teaching and learning about Native Americans/Ojibwe?

12. What three or four big ideas or concepts would you recommend environmental educators address when teaching about the Ojibwe in an environmental education settings?

APPENDIX B
EMAIL TO POTENTIAL PARTICIPANTS

Boozhoo,

I am writing to you because you have expressed interest in participating in a group interview for the development of my graduate thesis. The purpose of my research is to explore the beliefs of American Indian practitioners and environmental educators on how to teach about the Ojibwe in a nonformal environmental education setting. You have been chosen because of your knowledge, expertise, and leadership within the American Indian community.

There are minimal risks and no direct benefits to participating in this study. You can choose to withdraw from participation at anytime during the process.

The interview will consist of one group interview at the University of Minnesota-Duluth on October 30th at 5 pm. It will last no more than two hours.

If there is a different day that works for you during the week of the 28th-1st, please let me know. The interview will be scheduled according to the most convenient time for all those participating.

I have attached a copy of the consent document. I will bring this document to the interview so no need to print and sign ahead of time. If you have questions about this study please feel free to contact my advisor Chris Johnson at cwjohnso@d.umn.edu. To respect your rights as potential participant, if I do not hear back from you I will assume you wish to decline and I will not contact you any further regarding this study.

Thank you for your time and your help.

Sincerely,

Andrea Wakely
M.Ed. Candidate

APPENDIX C

CONSENT DOCUMENT

You have been invited to participate in a research study exploring the beliefs of American Indian practitioners on teaching about the Ojibwe in a nonformal environmental education setting. You were selected as a participant. Please read this form and ask questions before agreeing to participate. This study will be conducted by Andrea Wakely, M.Ed. Candidate of Environmental Education at the University of Minnesota-Duluth.

Background Information

The purpose of this study is to explore the beliefs of American Indian practitioners on teaching about the Ojibwe in a nonformal environmental education setting.

The Object

- To reflect on how the beliefs of American Indian practitioners can help guide and direct teaching about indigenous people in nonformal environmental education settings.

Procedure

If you agree to participate in this study, you will be asked to participate in a one on one group interview lasting no more than one hour. The interview will be audio recorded and the recordings will be transcribed to ensure an accurate documentation of the responses you provide. If the researcher calls you by name, your name will be removed from the transcription. Audio recordings will be kept on a computer file before and after the transcription process that only the researcher can access. Audio recordings and transcriptions will be destroyed by May 30th, 2014, by the researcher.

Risks and Benefits

This study has minimal risk however participants may feel vulnerable discussing their beliefs and practices with the researcher. Your personal information will remain anonymous. Your name will not appear anywhere on this study and your specific answers will not be linked to your name.

There are no direct benefits to participating in this study.

Compensation

You will not be compensated for your participation.

Confidentiality

The records of this interview will be kept private and stored securely in a file only the researcher can access via a password secured computer. The audio recordings will be destroyed by May 30th, 2014, by the researcher.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision to participate or not participate will not affect your relationship with the University of Minnesota-Duluth. If you choose to participate, you are free to decline any question I ask or withdraw from the study at any time.

Contact Information

Feel free to ask me any questions at anytime during this study. I encourage you to contact me by phone, 507.581.0448, or by email wake0061@umn.edu. You may also contact my program advisor Chris W. Johnson, 218.726.7042, or by email cwjohnso@d.umn.edu.

If you have questions or concerns about this study and would like to speak with someone other than myself or my advisor, please contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; 612.625.1650.

You will receive a copy of this information for your own personal record.

Before you sign this statement in person, I will ask you if you fully understand this study, the risks and benefits and your right as a participant.

Statement of Consent

I have read the above information and I have received answers to any questions I have asked. I consent to take part in the study. In addition to agreeing to participate I also consent to having the interview tape recorded.

Your Signature _____Date_____

Your Name (printed) _____

Signature of person obtaining consent _____Date_____